### Political Anticipation and Networks: Creating Anticipatory Systems for Government and Society

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From now on, tomorrow determines today

Abstract LEAP was established in response to the need for future-oriented programs for the European Union. Political Anticipation transcends the outdated paradigm of permanent, centralized, hierarchic, and isolated institutionalism by networking throughout the entire European Community. Just as every cell in a living organism plays a part in the functioning of the whole body, so do individuals, connected through modern technology, have an important role, on the local, national, and trans-European levels. Informed by trends, Political Anticipation attempts to guide policy in full awareness of possible outcomes. This stands in stark contrast to the deterministic, reaction-based, and big classic outmoded patterns prevalent in the European Community today.

**Keywords** Anticipation • Decentralization • Networking • Hierarchic/non-hierarchic • Transparency

#### 1 Introduction

"Political Anticipation" was developed by the European think-tank Laboratoire Européen d'Anticipation Politique (LEAP) in 2005. It was conceived as a future-oriented decision-making tool that applies the concept of freedom of informed choice as opposed to principles of determinism. Political Anticipation aims to diminish the influence and weight of past practices on the future and affirms that human beings are active participants in creating the government and society they desire. In view of this, it is imperative that citizens become aware of and

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understand the mechanisms at play in building the future, as well as ways to contribute to this goal.

#### 2 A Short History of Political Anticipation

Created in 2005, LEAP is anchored in the development of organizations and actions that, in Europe, date back to 1985. Prior to this (as early as 1972), anticipation related to politics and social systems was approached in the USA by Rosen [1, 2], and by Bezold [3]. In 1996, the Santa Fe Institute Economics Program addressed the anticipatory characteristics pertinent to economic processes—enmeshed as they are with political processes [4]. In Europe, anticipation was formally approached by Godet [5], Yolles and Dubois [6], and Adamkiewicz [7], among others. Franck Biancheri (1961–2012), a French political scientist concerned about the democratization of the European Union (EU) was the moving force behind Political Anticipation in Europe [8]. During his 25-year long career (which included several important governmental posts), Biancheri, together with the networks he initiated and guided, developed a unique competence in anticipating major socio-political evolutions.

The first documented attempt at anticipation dates back to June 1989 when Biancheri wrote a recommendation that Europe should consider preparing itself for the collapse of the Soviet Union. According to this document, Europe would have to contend with the consequences of such a major systemic change through addressing the key question of the new role of Central and Eastern European Countries (CEECs). At the time, the media and political leaders considered the event that Biancheri anticipated highly unlikely. Six months later, as the Berlin Wall was being torn down, the European Union entered a state of emergency. Unprepared for this momentous change, the EU ended up engaging in a chaotic and undemocratic expansion process that is accountable for today's Euro-Russian crisis.

Another significant and documented anticipation analysis concerning the crisis in 1999 [9] was presented. The independent report on fraud and mismanagement in the EU prompted the (infamous) resignation *en masse* of the European Commission (led by Jacques Santer). The above-mentioned political anticipation was based on the analysis of the Maastricht Treaty; it concluded that the Treaty had significantly changed the nature of the European Union, primarily in terms of scope and budgeting. The analysis went so far as to request that the *modus operandi* of the European institutions go through a rethinking process in order to prevent questioning of the EU's transparency and legitimacy.

In 1997, Biancheri initiated the Europe 2020 project. In 1999 this project evolved into a think tank to be guided by the concept of "anticipation." More precisely, the project focused on consideration of possible future states, intended to guide current procedures for elaborating the most effective political, social, and economic strategies. A series of high-level "anticipation" seminars (entitled *EU Governance 2020*) were conducted between 1999 and 2002. Themes related to EU

governance reform and expansion were discussed with representatives of the European Union, civil servants from various countries, and diplomats. The perspective of political anticipation informed the seminars. Biancheri's contribution was acknowledged in the publication of *Vision 2020* [10] among others.<sup>1</sup>

Political Anticipation was formally established in 2005 through a new think-tank, Laboratoire Européen d'Anticipation Politique (LEAP)—in English, the European Laboratory of Political Anticipation. In 2006, LEAP launched the *Global Europe Anticipation Bulletin*, published monthly. In January 2006, it reported on an "upcoming global systemic crisis" [11], seen as the set of changes entailed by the process of collapse of the global influence of the USA. Early 2007, the subprime crisis was anticipated in detail [12]. Based on this consistent work of anticipation, LEAP was approached by the Sorbonne. Its intention was to formalize the empirical method of Political Anticipation and to launch training courses. In 2009, the first series of training sessions on political anticipation was initiated in partnership with the Sorbonne's Department of History. One year later, the first formalization of the *Method of Political Anticipation* was published [13].

# 3 Political Anticipation: One Image, Some Principles, a Subject of Exploration

Imagine a sailing ship, called *Political Anticipation*, at sea heading towards a harbor. The boat must contend with icebergs and storms, and must keep its course as it deals with wind, high waves, and strong countercurrents. "Political" refers to the perspective from which strategy and decision-making are considered, taking current conditions (e.g., icebergs, storms) into account. "Anticipation" considers the variables (waves, winds, currents), which are possible future states that should be taken into account in order to optimally steer the ship as it pursues long-term goals, i.e., safe harbor; medium term goals, i.e., possible course adjustments; and short-term goals, i.e., setting the appropriate direction towards the harbor. The waves and winds and currents are changeable, as are political trends. Even though winds and currents are allies in propelling the ship forward, they will never set the ship on the right course towards the harbor without the sailors' expertise. LEAP's analyses and understanding of trends is indeed key, so that those in charge can optimally coordinate all the elements and set the right course that will lead the "ship of state" onward.

In short, the Political Anticipation is a very accessible and common-sense methodology based on the assertion that the human beings *must* be aware of their connection to and influence on a future state, so that they can learn to better set the current course of events leading to the desired future state. Each encompassing analysis includes the following points:

<sup>&</sup>lt;sup>1</sup>See, for example, Archive of European Integration (2002): http://aei.pitt.edu/230/.

1. Understanding the object of study: long-term goals, short- and mid-term trends, breaking points, trend accelerators/decelerators;

- 2. Optimal information, taking into consideration interdisciplinary perspectives, differences in history, language, national, ethnic, and social realities;
- 3. Optimal grounding in transnational societal reality, with the aid of technology (Internet) and networking, and in awareness of the overall guiding perspective;
- 4. A necessary state of mind: objectivity, independent thinking, courage to face the risk of being wrong and being opposed (sometimes very strongly), openness, and flexibility (in order to adjust to new events or realities);
- 5. The scientific basis and methods of the study: elaboration of hypotheses, validation processes, evaluation.

In his proposal for political anticipation (*avant la lettre*), Rosen [1] recommended submitting anticipation in politics, economics, and social issues to his (M,R)-System (modeling-relation system). LEAP's methodology is less formulaic, but, in our opinion, more effective, because it deals with complex reality directly, without reducing the various aspects of the analyzed reality to categories (such as effectors) to fit a system. Political anticipation is intended for policymakers in a complex world [14]. It is no exaggeration to state here that the ability to perceive and decide among the many future scenarios is vital to development, if not survival.

LEAP is aware that its method is an incomplete science and therefore prefers to present it as an open field of exploration, inviting researchers in both humanities and hard sciences to better understand the specific features of Biancheri's success in applying the anticipatory systems perspective to politics and related fields.

### 4 Capacity to Anticipate Versus Incapacity to Adapt

The European Community (as today's European Union was called until 1992) was the epitome of a centuries' old paradigm: pyramid, top-down, hierarchical organization. Biancheri took note of this modus operandi of a group of countries, collaborating on equal footing, for which linear pyramid-based governance was actually ineffective—even counter-effective. The old paradigm, in which structures such as those dominating the European Community, was giving way to a new one, more effective for the modern, technology-based world [15, 16]. Networking proved to be a more efficient way of operating in the new civilization of non-hierarchy, non-linearity, impermanence, and decentralization dominant in progressive societies around the world. Although LEAP operates in the trans-European area, it "thinks globally," since the EU is affected by trends from around the world. From the time he created his first trans-European organization (Association des États Généraux des Étudiants de l'Europe—AEGEE/the European Students Union) in 1985, Biancheri was connected to European and global social and political realities via the networks of collaborators and followers he created. LEAP considers that this multi-point, multilingual, and transnational

(i.e., "multi-sensor") connection to human society through networks—real and virtual—to a large extent accounts for its collective anticipation skills. An enhanced organic connection to reality is indispensible to "sensing" upcoming changes and identifying paths to deal smoothly with these changes. Through the Internet and network-based structures, LEAP perceives how it can educate people to think from the perspective of anticipation—of possibilities rather than probabilities.

A major challenge for political anticipation is to convince organizations (private companies and organizations, state-run institutions) to take the anticipatory approach. The current global systemic crisis has been anticipated by isolated individuals, but also collectively within organizations. Nevertheless, the latter happened to be incapable of turning their collective capacity to perceive oncoming changes into a systemic capacity to prepare for them. Thus LEAP is increasingly concerned about contributing to the invention of tomorrow's organic and anticipatory systems of governance. The term *adaptive* is often used, and sometimes more easily understood; but it connotes reaction to a past situation. LEAP prefers *anticipation* as the richer concept, transcending probability through possibilities. In the words of the cybernetician von Foerster [17], "Act always in such a way as to *increase* the number of *possibilities*." We believe that network-based organizations can develop this feature.

### 4.1 Growingly Dysfunctional Systems of Governance

Institutions around the world are in a state of self-induced "suffocation" under the weight of centuries-old practices and regulations, which even in the 20th century proved ineffective. For instance, a single EU country, in the framework of its dealing with the euro crisis, must proceed under legal constraints imposed by the International Monetary Fund (IMF), the Organization for Economic Cooperation and Development (OECD), the EU as an organization, as well as by the country's own (democratic) system of decision validation. All these legal frameworks were well thought, duly negotiated, and voluntarily agreed in the previous decades, in times of low crisis, by each country in concert with the others. The reason for this supra-national effort is obvious: in a globalized world—a world with huge discrepancies in size of nations—it was necessary to create clusters of nation-states sharing converging interests in order to ensure some influence on a global scale.

Despite good intentions, several problems arise from this architecture.

- 1. A problem of democracy: these supra-national entities are turning national governments into mere executors of their legal requirements, at the expense of elected governments' prime mission of serving the people who elected them.
- 2. A problem of relevance: the supra-national level, originally designed to enhance the capacity to serve its members' collective interest, lacks the grassroots articulation and connection to reality to understand problems other than theoretically, and therefore to address them other than on a legal, or even ideological, basis.

3. A problem of efficiency: The combination of "hardware" entities, all based on the 19th century model of nation-states, accumulating layers and layers of pyramidal (top-down) systems with linear chains of command and information, has led to a level of complexity that results in sheer dysfunctionality.

- 4. A problem of timeliness: This very complicated and disconnected system acts in a purely reactive mode. Even if the individuals within are capable of anticipating changes, and even if in some cases this capacity can be shared throughout the system, in the end the system runs into every problem as if it hadn't noticed it at all. (Imagine a Titanic full of passengers with mini-radar devices spotting the iceberg, but the captain remains sealed off in his command post.) The system then reacts to events, with a two-fold procedure. The first aims to solve the problem, in the realization that in complex systems it is too late to address a crisis when the crisis is already there. The second is to elaborate yet another set of rules in order to avoid repetition of the problem. Paradoxically, this creates the conditions for that very problem to arise again. A good example is the new "Cold War" between NATO and Russia. Each side sees the other as an enemy to its way of life, instead of considering possible forms of cooperation beneficial to all concerned.
- 5. A problem of adaptability: In the constantly changing reality of a highly interconnected world, these supra-national entities should be capable of adjusting a current state in full awareness of possible future circumstances, instead of regularly creating more such entities.

The euro crisis provides a very good example. First, it raised questions of democracy, leading to a political crisis that weakened the ability of any EU state to respond to a geopolitical crisis. Thus the whole of Europe is caught up in crisis, instead of the affected country. The EU invented the euro currency but never anticipated a euro-crisis. A new institutional embryo—let's call it "Euroland"—is established in reaction to an emergency, and soon ends up competing with its mother institution, the EU.

As chaotic situations pop up around the world, LEAP dedicates its efforts to elaborating political and institutional systems that not only analyze a previous system's failings, but, more important, identify new mechanisms, new ways of operating, while reasserting collective interest and stability. In the face of such challenging responsibilities, Political Anticipation aims to come up with useful elements for a solution.

### 5 Context and Anticipation

Anticipation is the sense that enables a *living* system (biological, social, political) to adapt to change. It is the "sense of context" [18] that takes change into account and defines and implements the adaptation (structural or temporary) needed to integrate that change. Otherwise change leads to shock, and shock is conducive to irrational

and unpropitious reactions conducive, in turn, to system failure. It may well be that the current speed of change increases as systems become more complex. But it could also be that uncontrolled complex systems increasingly create change. In both cases, enhancing the structural capability of political and institutional systems to deal with change is key. That is, such systems must realize that the need to anticipate (envision possible changes) and to act in consequence (adapt or adjust) is a vital challenge for our globalized societies.

# 5.1 Globalization, High-Speed Transportation, Internet: Time and Space Reconsidered

In the past two decades, it is not so much an official agenda of globalization that has changed the world's structure, but the new technologies, which have "democratized" globalization. That is, an agenda classically believed to be elaborated and implemented by economic and political elites alone, in fact (in most places in the world) is enjoyed by every individual who has access to digital technology, especially the Internet. The result is a profoundly interconnected social and economic global structure: countries, companies, non-government organizations (NGOs), and the ordinary citizen are all interconnected through a gigantic network. This network turns global humanity into an "organic" system in which things happening in one part of the planet end up having an impact in many other places. The world has de facto become one organic body—a gigantic *living* entity, hence dependent on anticipation for survival. Unfortunately, there are still too many centralized structures that, each acting in disregard of the entity, undermine it. (The Greek debt crisis easily comes to mind as an example.)

The space of actions has been dramatically reduced, and not only through rapid transportation. Each computer becomes a microcosm, a reduction of its user's world wide web of connections through a globalized access to news (for the time being, language differences remain a greater barrier than any objective space requirement), to his/her network of international "friends," project collaborators, customers, and clients. Live, real-time online discussions via social media, news from all over the world available anytime from anywhere, high-speed trains and low-cost airfares result in an almost complete annihilation of space-related constraints. In respect to time, it is becoming quite clear from this interconnectivity that what will come tomorrow is more the result of what is being done today than what was done yesterday. Consequently, news headlines and individual conversations are full of the future. Everyone has something to say about what might happen as the result of a certain decision or event. The Internet connects the future to the present as much as it connects far to near. Every level of decision takes into account upcoming developments. The Internet connects the future to the present as much as it connects far to near. In fact, the future has been integrated in an enlarged present. Our grandparents used to purchase their tools on the basis of past experience and the expectation of permanence. Today, buying a computer does not require any analysis of past

computers, but the anticipation of upcoming technological developments that suggest when exactly to buy, and which brands and models best reflect these developments.

# 5.2 Global Complexity and Organicity Require and Enable Political Anticipation

It goes without saying that the complex, interconnected, organic world described above *must* enhance its ability to anticipate future possibilities. It becomes incumbent upon complex entities to look farther ahead than months, even years, because they need more time than simple entities in order to prepare for change. (To return to the ship metaphor: a super tanker relies on radar to see far enough ahead in order to have sufficient time to adjust course; a small vessel can rely on short-range vision.) The complex, interconnected, organic world also provides the tools for an enhanced capacity to anticipate future contingencies: the Internet facilitates information delivery on the scale needed for anticipation; moreover, it provides access to information from practically all possible sources—the arts, cultural events, sports, political actions, economic developments, local events, and so much more, from low to high. Although many governments curtail their citizens' access to the Internet, and even plant misinformation, their attempts only prove the power and potential of the world-wide web.

### 5.3 Global Organic Social Body and Its 19th Century Institutions

In today's globally oriented society of people, interconnected, informed about everything they are interested in, there is a tendency to take it for granted that they have an enhanced capacity to understand events and to anticipate the possible directions in which they may lead. It is unfortunate that with all this information available, the institutions entrusted with steering the most propitious course are grounded in principles reflecting 19th century thinking. However well these models (centralized, hierarchic, linear, sequential) may have worked since 1800 (the beginning of the Industrial Age), they have already proven their ineffectiveness for our post-industrial age. Paradoxically, these institutions are run by highly educated, well-informed, and forward-looking individuals. But they must function in a prison-like framework in which each department, isolated from the interconnectedness of current human pragmatics, operates. Above all, there is a structural incapacity of these institutions to properly "read" the information conveyed to them, and to propose solutions based on new realities. Their deterministic attitude is, "If it worked well in the past, it will work well for the future. If it does not, it is not the fault of the system." This is the typical "Cassandra syndrome": the institution is structurally incapable of engaging the changes suggested by the prediction; the signal is too weak and the effort too important. Consequently, the choice made is "Do not believe what she (Cassandra) says and change nothing!"

Such institutions are structurally incapable of anticipating where trends might lead. For example: a revolution will always lead to democracy. Or: Independence will lead to progress. (And no one ever anticipates failure!) They are bound to determinism: Do this and that, and such and such will result. That's the way it has worked before, so it must work that way always. (For example: If it works for Germany, it will work for Greece.) For this reason, despite the effort some institutions make to create within themselves a capacity to anticipate changes (forward study units, interaction with civil society organizations, democratic mechanisms), the established political and institutionalized systems are functionally incapable of accommodating; they can only move when pushed by problems.

The challenge of improving the efficiency of our institutional and political systems, whether national, supra-national or international, is twofold:

- 1. To enhance the connection to reality;
- 2. To improve the capacity to translate information into action.

In the 19th century, the aim was to prevent change, especially political change. Economic change took its own course: rapid, "revolutionary" change (it is called the Industrial Revolution for a reason). Operating within a historic paradigm of slow progress, centralized authority, institutionalized hierarchy, homogeneity of the social order, the deterministic mindset often failed society as the years and decades went by. In the 21st century, change happens so fast that it often takes people society by surprise. And despite the fact that people are used to change, political and institutional systems never act in anticipation of it. The general aim of political and institutional systems being social stability, it is necessary for them to understand changing realities, to analyze trends, developments, and even extreme events [19], in order to come up with policies that lead to the most effective outcome. We need to switch from a creationist vision of political and institutional systems—meant to be valid for eternity—to a Darwinian view—constantly adapting in order to survive.

The characteristics of today's global environment that compel the system to change probably also provide tools for the future political and institutional engineering.

### 5.4 Anticipation and Networking

Political Anticipation emphasizes that understanding ongoing trends and anticipating possible developments is relative to the quantity and quality of the information gathered.

Information is what co-relates an anticipation. [...] Information is the ultimate substratum of anticipatory processes. Anticipatory systems are systems of information, themselves subject to interaction with other systems [18, p. 101].

Consequently it is vital that a superior information gathering system must be put in place. The principles of this good information consist of making sure the information gathered creates the conditions for objectivity. That is, it must reflect a diversity of sources: mainstream and marginal, general and specialized, right and left, from different countries and in different languages, all considered in the holistic environment.

Being part of a network characterized by diversity is a key factor in maintaining complete connection to realty and creating the proper environment for anticipations. Indeed, the capacity to anticipate can be improved by enhancing the connection to reality through networking. Thus, political and institutional systems are well advised to structurally connect themselves to the existing global network of information and interaction.

A network is a non-hierarchic, non-linear system of links that connect the nuclei of the system in a self-organizing way. This means that no nucleus is permanently connected to all other nuclei in the system, but only as the situation requires. The world-wide web is, of course, the best known network; it facilitates the exchange of information from any point to any other point. Sometimes the networks go through a hub, i.e., a center common to all lines in the network; sometimes they do not need the hub and connect only to the systems deemed necessary.

### 6 Towards an Organic System of Governance

How do 21st century pragmatics apply to political and institutional systems? What could a modern institution be like?

It should be decentralized, its components connected through networks of people and instruments rooted in their environment. Today there is no need for huge buildings that shut government workers off from reality. They can remain in the place that adds value to their work—connection to a specific environment, for instance, to nationality, to a profession—as they punctually combine the value in a common project through online communication or conferencing. Modern political and institutional systems can consist of light structures, technical secretariats mostly, that coordinate meetings, decisions, and actions of ad hoc, self-organizing networks.

Such entities should be project-based, and impermanent, that is, lasting only as long as the purpose (the project) justifies them. The world is full of meaningless institutions and organizations. Imagine if the United Nations (UN) was replaced by self-organizing networks of organizations tackling a common regional problem, involving only those other participants that can actually help. Instead, it has become a super-expensive center of nations, most of which have no stake in problems that are not of importance to them, and which have nothing in common with the principles that the UN is supposed to uphold. Such organizations weigh on society; through their cost, influence, and uselessness they are actually counterproductive.

The identification of specific problems could result in the creation of temporary coordination secretariats connecting networks of experts and animating them around a common objective. They will be interconnected through the reality, the actuality of a situation or question. Each system can be connected to the other systems into a global network of institutions. Again some uncomplicated administration offices can connect part or all of these institutions on the basis of specific de facto projects, concretely activating connections among these organizations. These are the conditions for a non-pyramial/non-hierarchic global system of governance.

There is something fractal about networks. Indeed, it is anticipated that each component of a network can itself form a network, forming "natural" connections with new members, all equal. A municipal waste management worker can be seamlessly integrated into a supra-national network of experts on the environment. Indeed, in a network-based system, the individual is the basic component, the projects are the connections, and the institutions are the hubs.

# 6.1 How an Organic System of Governance Becomes "Naturally" Capable of Anticipating

Turning political and institutional systems into networks and hubs enhances their perception of social realities. The inherent fractality of networks facilitates the network's capability to understand trends and anticipate future developments. It is the sum of the capacity of individual components to understand trends and anticipate future developments.

Thus the network creates the conditions for an upward leverage of the quality of information, understanding of trends, and anticipation of upcoming changes for both society at large, as well as for the individuals making it up. For example, trees, through the interconnection of their roots, inform one another of the risk of contagion from a diseased tree. The tree system creates the possibility for each tree to adapt. The combination of these individual adaptations results in the adaptation of the forest altogether [20]. Here we see that adaptation of a complex structure is possible through the collective adaptation resulting from individual mini-adaptations, easy to implement.

Political anticipation claims that this natural mechanism is applicable to social entities when these entities are organized in networks—when they are "organicized"—and therefore become able to collectively integrate Darwinian adaptations.

#### 6.2 Back to the Individual

Of course this collective capacity can only benefit from the individual components' increased awareness of the basic principles of good anticipation. It therefore appears important to set up rules to rationalize this new requirement of taking the future (better yet, possible futures) into account at every level of each individual's life,

whether professional or personal. That's the purpose of Political Anticipation: to provide as many individuals as possible with simple tools that will make them aware that they are dealing with the future on a daily basis, that they are being told many different things about this future, and that they must be able to make their own judgments from the apparent possibilities—or to create new possibilities.

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