Research Paper

On the 'Social Sin' of Political Analysis: A Critical Quantitative Approach from a Systemic Perspective

Francisco Parra-Luna*

Universidad Complutense de Madrid, Madrid, Spain

What is a political system? An organizational 'instrument' to satisfy the objective and subjective needs of people. How to operate it? By optimizing the relation T = Y/X where 'Y' is the 'system of values' produced and 'X' the means employed. Why does political science ignore this crucial relationship? Because it admits three historical fallacies: (i)it is not possible to know what values are produced by political systems; (ii) even if these were known, no valid quantitative date are available; and (iii) even if data were available, it is not possible to express 'T' as an integrated index. Three fallacies to show that most political analysis could be committing a grave social 'sin' because they scorn, systematically, the only thing the voters are looking for. Copyright © 2013 John Wiley & Sons, Ltd.

Keywords political efficiency; systems theory; reference patterns of values; axiological efficiency; synergy

INTRODUCTION

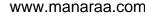
Could current political analysis be committing a serious social sin? Could it be unconsciously drifting towards the analysis of what is secondary as opposed to what could be relevant? Could it have forgotten too often the ultimate aim for which states and governments exist or were created? Should not these questions be asked, not to underestimate what it has done until now, but to claim and foster what it could also undertake? Political science's hypothetical 'social sin' would have two dimensions: the first concerns its **ethical**

*Correspondence to: Francisco Parra-Luna, Universidad Complutense de Madrid, Madrid, Spain. E-mail: parraluna3495@yahoo.es consequences (not to see politics from the point of view of the man in the street); the second focuses on partial parts of political systems (forgetting their overall **efficiency** in terms of universal human rights as an interrelated set).

But we could carry this argument a little farther and reflect on what political scientists do with respect to the object of study. We might ask for the nth time: What is political science? There is no need to go back to the old founders (Plato's Republic, Aristotle's Politics), or in the middle ages Machiavelli, Hobbes and Locke, to take as a given that it is the science (understood more as pursuit of scientific rigour than cumulative theory) that attempts to understand the origin of sociopolitical phenomena and how they function and to pose solutions to the respective



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problems. With their in-depth analyses of sociopolitical phenomena, Weber, Durkheim, Sorokin and Parsons from Sociology and Laswell, Deustch, Duverger, Easton and others from modern political science enhanced that understanding. Marx and the long critical tradition that followed (the Frankfurt school, for instance), in turn, brought to light certain therapeutic possibilities that may have ultimately contributed to progress with the advent of today's so-called developed democracies. In any event, today's (like yesteryear's) political scientists seek to understand the society in which they live and help improve it. This is the sole function of political action and the essence of the political scientist's trade.

But the key question is as follows: Why have individuals been forming cooperative relationships since the beginning of time? Or in other words, why do societies of whatever nature (family, group, associations, political parties, nation-states...) exist at all? Profusely answered in every sociology or political science manual ever published, this ageold question should perhaps nonetheless be answered again as follows:

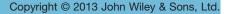
Initially, for one sole reason: *individuals work together to better meet their needs*, understood to be a suite of what may be felt as present or future desires, wishes, drives and aspirations of whatever nature. There could hardly be a more succinct answer.

Assuming that to be the initial motivation, it would be the 'expectations of reaching higher degrees of satisfaction', and such *expectations* alone, that would explain the ultimate aim of living in society through some kind of political organization. They would, in a word, represent the 'cement' that binds and the force that galvanizes durable societies and polities, inevitably driving individuals to interrelate with different degrees of intensity and establishing among them an initial attraction that is not necessarily strictly rational. The intensity of that drive is what later makes associations among individuals endure.

Hence, one concept that is central to political science is social or organizational efficiency. The efficiency of social organizations is the only idea able to justify their ultimate purpose, demonstrate whether the aims for which they are created are met, make good the adage 'united we stand', prove that better results are obtained when tasks are undertaken in common and, in short, show that any effort or extra cost needed to make cooperation effective is worthwhile. The enormous increase in early age industrial productivity explained by Adam Smith's famous pin factory example was simply the production 'differential' attributed to any societal undertaking. This same efficiency differential was discovered by primitive humans, who together were able to do what would have been impossible for any single individual. And of course the very first known human society consisted in the mother-child relationship formed at childbirth. When the greater benefit anticipated by the individuals involved fails to materialize, the society may disappear, as it is known to happen when marriages end in divorce or business partners find their joint venture no longer viable.

Social efficiency in general is such a core concept that it has come to represent the ultimate aim of societies in general and consequently to play a key role in political science's scientific endeavour. This necessitates a revision of the systems known as historic needs, be they individual or social, natural or artificial, simple or sophisticated, rational or irrational. If political organizations exist solely to enhance levels of satisfaction, the needs in question must be identified to use them as patterns for measuring social and political efficiency, change, progress and the intelligent adaptation to times and circumstances; this is a requisite in judging to what extent, for instance, one type of polity is worthwhile compared with another, and in short to calibrating (criticizing or pondering) the virtues or 'added value' of, first, the social as opposed to the individual approach, and second, one type of political regime as opposed to another. If we have no such list of needs, it may be safely asserted that we are in no position to undertake a genuine analysis of political phenomena.

The next step must necessarily be to specify such needs or requirements based on universal human rights. Initially and from an intuitive vantage, it does not appear to be particularly difficult to ascertain that people, regardless of time or place, pursue values such as good physical and mental *health*, a certain level of *material well-being*, *safety* from danger and contingencies,



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a knowledge and understanding of the world around them, freedom of movement and expression, perceived *justice* in the distribution of the available resources, life in harmony with nature, full development of one's personality as an intelligent and creative being, being loved or admired by others and finally to have sufficient power to survive in a competitive world. These 10 requirements would constitute a reference pattern based only on so-called 'universal' needs or needs common to the human race and distinguishable from a much broader spectrum of so-called cultural needs. And they form a very well-known suite of natural rights generated on the basis of the most innate and desirable of human aspirations.(see the concept of Reference Pattern of Values in Parra-Luna, 1975, 1983, 2000, 2001).

This initial list of human needs, or any other regarded to be better founded, should be built into a theoretical model that should in turn be appropriate for the systematic measurement and comparison of societies, or even individuals, and specifically political systems. On these grounds, a hypothesis may be advanced to the effect that social progress is determined by an integrated rise in the levels of satisfaction, both actually achieved and as perceived by the people involved.

THE ROLE OF THE 'NEED/VALUE' DYAD IN POLITICAL SCIENCE

Such levels of satisfaction can only be attained by producing the values that represent them. Here, we might cite anthropologist C. Kluckhohn for whom 'value and need are two sides of the same coin'; i.e. each need is met by producing the respective value. Hence, for instance, the value 'health' corresponds to the need to feel physically well, the value 'freedom' to the need to feel free and the value 'knowledge' to the need to understand the unknown. The dynamic system of each individual's or society's needs is met, then, by 'producing' the respective 'system of values'. Political science (the basic explanation of why individuals live in polities) ultimately and inexcusably becomes axiological, explaining not only the existence of de polity per se, but also providing for the comparison across time and space of different political organizations in terms of their axiological efficiency.

Building on the preceding premises, the next step is to make each of these need/value dyads operational to be able to discuss them rigorously and honestly. Lazarsfeld established the basic methodological rules for this endeavour, based on a principle consisting in beginning with a conceptual image of the concept (the need/value dyad), dividing it into theoretical dimensions and then sub-dividing each dimension into quantified empirical indicators. The final stage, numerical integration, yields the respective series of objective (record of events occurring) and subjective (opinion polls) indicators, something that I will be describing later. If, as Lachenmeyer sustains, sociology cannot be regarded to be a science because of the poor quality of its language, Lazarsfeld's method is an essential contribution to surmounting the shortcomings of that language.

And when all the necessary concepts—both qualitative (distinguished on the basis of semantics) and quantitative (distinguished on the basis of intensity)—are finally in place, political scientists can operate with them to seek measurements that describe—with the greatest possible accuracy—political pathologies and the most suitable therapies. Measuring the social climate of a polity, for instance, may help to discover social-political pathologies and ways to treat them. And specifically, quantitatively describing that one polity is better or worse (more or less efficient) than another and explaining the factors determining the difference.

All the foregoing scan be summarized in the following syllogism:

- (1) People are, by nature, *needy*.
- (2) If they form societies and political organizations, it is *solely* to better meet their requirements through the greater individual efficiency attained.
- (3) Therefore, the 'political efficiency' concept is the construct that *explains* the existence of any polity and, therefore, all political science deriving from the need to understand and improve such efficiency.

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Syst. Res. 30, 661–676 (2013) DOI: 10.1002/sres

This basic syllogism can be extended and developed in the following successive steps:

- (1) The identification of the requirements common to the human race makes it possible to establish a *reference pattern* that can be used for comparative measurements of efficiency
- (2) In which each requirement can be expressed in terms of the dyad that begins with a 'need' and ends with the respective 'value'.
- (3) Each value must have a precise *operational definition* in the form of factual, objective and subjective indicators.
- (4) Consequently, the success of the 'sociopolitical venture' is given in quantified (and therefore 'falsable') form through the *integration* of the different degrees of individual satisfaction attained.
- (5) Political science, then, having abandoned this programme, is committing a certain social sin by only studying some partial, secondary or less relevant subjects of political life.

The inevitability of this methodological sequence for any analysis of the existence of the polity *per se* having been established, along with the ensuing importance thereof for any manner of sociopolitical analysis, regardless of the object, the following should also be borne in mind: (i) one or several of the reference pattern values are necessarily involved; (ii) each value attained forms a system (with complex interrelationships) with all the other values in the pattern; (iii) account must be taken of their ultimate effect on the system (the interrelated suite of values); and (iv) axiologically decontextualized or non-systemic politological analyses may be open to scientific critique.

In short, a possible axiological theory of the polity may meet two ends: (i) to focus on the political efficiency concept as the construct demonstrating the ultimate aim of the polity (and political science?); and (ii) to obtain theoretical conclusions through the use of disprovable language. This leads us to pose a problem central to today's political science.

The social unit (from couples in love to the most complex political organization) is, then, the essential cell of modern polity, which is woven from countless more or less specialized social units. Families, schools, churches, companies, and of course bureaucracies, political parties, governments, international organizations and so forth are the political units on whose 'synergistic differential' we depend from cradle to grave, making the modern world inconceivable without their operation, development, creation and demise.

And yet political science seems to have abandoned the study of political units as such. And if political science-the science of political groupings—does not attend to this question, who will? Because of the division of scientific-academic fields, each of the specialities studying social phenomena ultimately explores and analyzes its respective tree, but none sees the forest as a whole, i.e. the synergistic differential. For instance, one of the last published works is Alexander *et al.* (2012) when they try to measure 'effective democracy' instead of 'effective political system' as a whole. And yet this may well constitute the most purely sociological view of political units, inasmuch as it is presumed to be the only perspective of interest to the so-called 'man in the street'. Specifically, what I mean is to take what might be called the 'added productivity gained by a polity as a result of its mere existence' as an object of research. Any study of that productivity should be based on fundamental equation of basic efficiency T = Y/Xwhere 'Y' is the outputs, and 'X' is the inputs, and from where:

- (1) The structure of *Y* insofar as it describes a complex comprising theoretical dimensions *D* and empirical indicators '*y*'. Formally: Y = f(D1, D2, ..., Dn) where Di = f(y1, y2, ..., yn). Any political system must, then, be aware of its objectives. If they are unknown or unforeseen, if they are not compared, the theoretical understanding of the political unit may be deficient or spurious and its government politically reprehensible, because of the failure of analysts and politicians to take account of the needs of the members of the unit and the degree to which they are met.
- (2) The understanding of X in terms of the resources used, m. Formally: X = f (m1, m2, ... mn). Any political unit must be aware of the resources it uses and their total cost to obtain the aforementioned objectives, a measure of utmost ecological or negentropic interest.

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(3) The final understanding of *T* in terms of *Y* and *X* in the expression T = Y/X where, by virtue of the prior standardization of indicators for averaging, if T > 1, positive transformation takes place; if T < 1, transformation is negative and if T = 1, it is neutral.

Neglecting any of these three dimensions constitutes a very serious omission, for it entails the failure to see not a forest comprising trees, but a community of men and women with needs that they seek to *satisfy* exclusively through their social and political interdependence. 'Human societies exist for only one reason: to enable humans to satisfy their needs'. Or, to quote Mullins (1996: 294) when referring to organizations: 'strictly, organizations have no goals; only people do'. The result of such neglect would be that the leitmotiv of the political system, the general degree of satisfaction-real and/or perceived-of all its members, would go unanalyzed. The soft-focus vision of scientific specialities (Ortega and his 'barbarian specialists' necessarily come to mind) and the resulting segmented study of society can be likened to analysing the separate parts of an engine before it is put together: the unity, operation and purpose of the engine as a whole and the raison d'être of its parts are lost on the analyst. Let us see what happens when we try to understand a society.

Economists, of course, study means of production, and modern economists in particular monitor a short series of instrumental variables such as inflation, interest rates, investment, balance of payments and very few others among them economic development. Another speciality, social anthropology, studies the traditions, customs and folklore of peoples and societies grouped in a more natural, less artificial manner. And while values constitute one of the key concepts of social anthropology, they are generally viewed more from the perspective of diversity (cultural relativism) than as the convergence of personal interests in few central values or universal goals. Social psychology, in turn, studies an individual's behavior in society, and while it takes the individual as a *suite* of objective and subjective needs, the focus in this discipline is, naturally, more on the social factors that condition individual behavior than on the behavior of the social unit overall. Historians research the past, centering their analyses either around the behavior of large sociopolitical units or the biographies of notables, with insufficient regard for either the comparison of the value systems-general goals reached by past societies or the identification of their axiological trends. Philosophy (or what appears to be left of this discipline) has shifted primarily towards formal logic, which some see as unrelated to today's concerns and problems in what would seem to be a retreat from the classic humanistic approach. A special mention goes to Sociology. Despite its residual nature in respect of other sciences, which have sprung from it, Sociology covers a considerable range of issues. One only has to look at the 91 subsubjects of the 'Sociological Abstract Classification Scheme', each of which can be further subdivided. However, what is vexing is that the concept of 'social efficiency' (and 'organizational efficiency' in particular) is totally absent in this list, although it is precisely the different degrees of usefulness and individual satisfaction which brings about the 'associative fact'.

And what about political science? Perhaps the discipline that should be most committed to specifying and analysing organizational-political answers to the population's demands and needs. This branch of social science errs when it considers the political system as a separate subsystem of the social system that it treats as the surrounding environment. Such an academic and artificial separation, built perhaps around an analogy with spatialism, a fashionable concept of late, has led authors of the prestige of David Easton, G. Almond or H. Eckestein to define, respectively, political system outputs to be 'decisions and actions'; the outputs of the three powers—legislative, executive and judicial-and the outputs as 'durability', 'civil order', 'legitimacy' and 'decisional efficacy'. Not a word is said (Deutsch is the exception) about the universal comparable needs of the community and its political response to those needs, which should be the key targets of political-logical analysis and more precisely in terms of the overall system of values performed. Political science usually deals with electoral processes, power, lobbies, political bureaucracies, international relations and so on, that is to say, political

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science deals of course with individual values in a more or less implicit way. But rarely does it address the axial political problem, i.e. the definition, measurement and comparison of what a political system *should do and does*, as a whole interrelated system, to respond to the specific demands made by the population. This is more galling because the population votes for or chooses its politicians for the exclusive purpose of fulfilling this neglected duty. The duty of presenting the overall system of values has been performed, in comparison with the system of values politically promised or engaged.

WHAT OF THE SOCIOPOLITICAL SYSTEMIC APPROACH?

A genuine systemic approach (the understanding of the global system) obliges the analyst to consider the following:

- The ultimate end of the system, which cannot be other than the best possible satisfaction of the citizen's needs.
- (2) Due to the transforming structure of systems

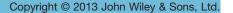
(Inputs→Transformation→Outputs→Control), this ultimate end should be known.

- (3) This knowledge can be worked out in a quantitative form through operational definitions and empirical indicators, both objective (facts) and subjective (opinions).
- (4) The relationship T = Y/X allows to calculate a first basic notion of political efficiency, which can be useful for both space and temporal comparisons.

These would be the minimum requirements of a systemic approach to the political system. But in spite of some efforts in this direction, the problem has not been undertaken seriously. First of all because analysts did not consider any possible general model of 'outputs' (*Y*) as an interrelated system of human needs and universal rights, although mention must be made of the wellknown works of Spiro, Apter, Almond-Powell, Dhal, and above all Eckstein (1971) and Parra-Luna (1975), who have come close to it. Lately, the works of Schmidt (2002), Gavious & Mizrahi (2002), Jenks (2004), Balaguer-Coll et al. (2007), Angelopoulos et al. (2007), and Willke (2010a, 2010b, 2010c) among others have provided new insights on the concept of political efficiency. However, a rigorous sociosystemic approach as a whole, which could have been expected to focus on the theoretical and ultimately empirical teleology of social systems (the description and measurement of their goals, and therefore their progression/regression as a core task), has never been adopted (as far as I know) the necessary double point of view: first, to contemplate de system from the point of view of the man in the street, and second, to consider the whole set of human needs as an interrelated system. This has led in my view to forgetting the central and ultimate aim of political science as a science, which has to account for collective and also for individual efficiency. If we have a look at the International Political Science Abstracts, we could see that not even the more systemic approaches seem not to be specially interested in the fundamental 'input/output' relationship of the systemic transforming operation to which the political system owe its very existence.

Meanwhile, the world's real social problems caused by the absence of this output/input relationship (or Y/X) of political systems, both great and small, are nevertheless handled by governments (inevitably and overly concerned by political power games), firms, organizations churches, NGOs and other humanitarian bodies, but who lack the tools to conduct the necessary scientific analysis for their understanding and treatment. An explanation for this axiological indifference may be found in the future.

Professionally, this leads us to a disquieting conclusion. We spend our time explaining and understanding the causes of something we do not know. Although the outputs *Y* are unknown, we persist in analysing *X* and *T* as their explanatory causes as it is taken for granted that Y = f(X,T), or explicitly that Y = XT. As for decades, it has been systematically attempted to explain something that is unknown, the politological adventure has become a task almost surrealistic, which do not even allow serious political critique of polities (or governments) because we do not know to what extent a given policy or variables change may affect the whole values system which represents



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Y, or even better the value of T as the ultimate goal of any organized polity. So, not only our analysis is not sociologically based (it is not based on the point of view of the man in the street), but we are methologically off track when we try to explain something of which we are ignorant. Last, we also sustain that it is not possible to know the concept Y, which closes the pessimistic circle of the politological profession. Summarizing, we do not even know why the polity exists. Or what could be more serious: it seems that we prefer not to face this question if we have to look at the political system from the perspective of the man in the street.

IS THERE AN ALTERNATIVE?

The foregoing does not mean at all that political science's historical contributions have not been of value. However, it can be argued that it is both complementary and urgent to tackle the problem of the concept of political efficiency in its two main dimensions: first, the description and measurement of the expression T = Y/X; and second, its explanation through the complex set of variables that represent *X* and *Y*, and mainly their relationship *T*, which is the political (organizational) dimension par excellence. A seven-step strategic programme could then be developed:

- To reconsider the *basic elements* of any political system from a humanistic perspective. For instance, to criticize the four basic elements (individual, society, need and value). It is difficult to analyse a system properly without knowing its basic components.
- (2) To reconsider whether any organized polity is necessarily a *transformation* system composed of the 'Environment-Inputs-Transformation-Outputs-Control-Feedback' chain.
- (3) To reconsider whether the pursued set of outputs (*Y*) of any political structure is *the most significant dimension* from the sociological point of view (of the man in the street) and therefore also political.
- (4) To reconsider whether these outputs can be represented by the referential pattern of values composed of the 10 following universal values mentioned previously: *health, security, wealth,*

knowledge, freedom, distributive justice, conservation of nature, quality of activities, moral prestige and power (See their operational definitions in Parra-Luna, 1983).

- (5) To reconsider whether the level of achievement of each one of these values can be quantified following the *Lazarsfeld's methodology from the concepts to complex indexes.*
- (6) To reconsider whether the *inputs* (X) can be represented by the levels of expenses, costs, energy consumption, etc. necessary to produce the systemic outputs.
- (7) To reconsider whether a basic notion of political efficiency could be measured by the expression Y/X = outputs/inputs. Although there can be more subdimensions of the ultimate concept of political efficiency such as efficacy, effectiveness, ecological performance, environmental adaptation and others (see below the proposed five dimensions of the concept of organizational efficiency).

If these re-considerations could confirm this possibility, political science could make an important and decisive step forward. Any polity (for instance, the nation-state) could be subdivided (because of its fractal property) into a multitude of political organizations, big and small, simple and complex, (from the very small town to the global polity) and all of them could be analysed through this new 'transforming' approach where the general rule would be T = Y/X. Humanistic political science's main concern, then, would logically be, to understand how to achieve the best possible *value system* (Y) for each one of the sub-political systems at the minimum ecological cost (X), in the benefit, of course, of their individuals as human beings.

Arrived to this point, it is unavoidable to ask: How is it possible that political science, do not take into account, precisely, the motives for which individual people forms political associations? How is it possible to forget that all political systems can only produce these 10 universal values, which are pursued by people? How is it possible that political science does not account and measure the levels to which these different values are produced in order to be able to make rigorously any possible criticism? How is it

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Syst. Res. 30, 661–676 (2013) DOI: 10.1002/sres

possible to ignore the ethical dimension of this forgetting and do not look to the system from the perspective of people, because it is people who pay? How is it possible to abandon the sociological genuine perspective, which is precisely to contemplate the system from the position of the man in the street? Still we do not know that, what people are looking for when they shape polities, is to achieve the best possible type of life, at that this happens in any kind of any 'political' organization, big or small, primitive or modern? And, we do not know that this *better life* as an analytical unity is nothing but an 'integrated system of values' (or compatible levels of health, wealth, security, freedom, equity, social prestige, etc.), and that only because expectatives of a better life people live together and collaborate between them? Why then, we do not count, register, measure and compare, in a systematic and routine way, the system of values performed by any type of political system -their 'raison d'etre'-from the small municipality to the nation-state? Is it so difficult?

The difficulties we may find, according to the specialized literature, is because we take as axiomatic the following principles: (i) it is not possible to agree about which values have to be performed by any kind of society or political organization, so that we could establish space-time comparisons; (ii) even if we would agree on the values, we would not have enough and good quantitative data to define them operationally and validly; and (iii) even if we could define values validly, it would be not possible to work out a complex index of axiological political efficiency. These three positions have been defended and we continue defending them.

Therefore, this essay will try to demonstrate the fallacies that underline these three principles, although it is also necessary to confirm two facts: first, to recognize the important contributions the different social sciences have been done, although some of them like political science, could have put more emphasis on the systems of values and the global efficiency performed by the polity; and second, to recognize also that it is not completely gratuitous the position that is aware about the difficulties to overcome in order to calculate empirically the global axiological performances in the expression T = Y/X. Nevertheless, times have changed quickly and new possibilities have been emerged because of new methods, data and computers. Only as an example, we are going to take the standard political system (the nation-state) like the political unity to be analysed and, we will try to show that it is perfectly possible to measure its efficiency and to know the system of values produced. It seems clear, therefore, that a solid presentation of this hypothetical 'social sin of political science' has first to work out empirically the concept of 'axiological efficiency' and second, that it can be applied to any kind of political system.

A BALANCED SCOREBOARD FOR MONITORING POLITICAL EFFICIENCY

Any political system concerned about its overall efficiency and aware of the complexities of an age in which technique, information and knowledge prevail, can hardly ignore the existence of balanced scoreboards, tools that measure to what extent it reaches its objectives. This instrument is so essential that there is scarcely a political system of any prominence without it, but that does not necessarily mean that it meets all the necessary and possible requirements of the information age.

The methodology adopted on the occasion of the present study is directly inspired on the 'Balance Social de la Empresa'; corporate social audit, corporate social responsibility and corporate balanced scoreboard draw from the various methodologies proposed by authors specialized in corporate management. But the present approach attempts to include the characteristics listed in the succeeding text, some of which embody some degree of theoretical or operational added value with respect to prior formulations.

- (1) The theoretical basis for this political scoreboard is the reference pattern of values and the interests of the nation-state citizens; in other words, it corresponds to the interests of the systemic whole of people in the polity.
- (2) It covers both social and economic aspects.
- (3) It uses both objective (statistically recorded facts) and subjective (quantified record of opinions) data.

Syst. Res. **30**, 661–676 (2013) DOI: 10.1002/sres

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Francisco Parra-Luna

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- (4) It standardizes data in coefficients that fluctuate around the number one, facilitating interpretation and comparison as well as integration in more complex indices.
- (5) It includes standard political control through routine 'forecast-follow through-deviation' procedures.
- (6) It can subdivide the results by ministries, departments or areas of responsibility as well as by reference pattern values and their component indicators.
- (7) Because standardized indicators are used, the results can be charted on graphs for readier evaluation.

This Polity Balanced Scoreboard (PBS) pursues three primary objectives:

- (1) To serve as an aid for the best possible diagnosis of a polity's situation, showing its strong and weak points with a view to identifying suitable remedies.
- (2) To provide for strategic planning based on a second selection and discussion of the indicators regarded to be most decisive for the polity at any given time.
- (3) To re-establish integrated and standardized management control with comparable indices.

The stages of periodic PBS formulation (monthly, semi-annually, annually) are much the same as in conventional management control, namely,

- (1) Preparation
 - Establishment of the general outline of polity policy for each period considered in the context of the polity's long-term mission.
 - Formulation of a list of (objective and subjective) indicators that translate the policy defined in the preceding item.
 - Establishment of the scores to be attained in each of the indicators on the grounds of the previous year's results and objectives for the following year.
- (2) Follow-through
 - Performance of the necessary action to reach the proposed levels.
 - Analysis of the deviations at the end of each period, presenting a chart classifying

efficiency levels by ministries, departments or areas of responsibility.

 Routine meetings with ministries, departments or areas responsible to correct possible deviations, after analysing the aetiology or cause.

In short, the primary difference between this PBS and former 'State of the Nation reports', 'account control reports', 'political audits' and similar instruments lies in the fact that the PBS is an analytical tool to be used for in-house or strategic purposes rather than for public reporting.

INDICATORS TO BE USED: AN INITIAL SIMPLIFIED SUGGESTION

Some of the indicators that may be appropriate for a comprehensive PBS in a medium-sized/large polity are to be found in the principles underlying the Value/Citizens Matrix. A matrix is where the motivations, needs and interests of all the citizens in the polity should be properly represented. Let us consider to simplify that the polity is subdivided into the following big political areas: (i) head of government (HG); (ii) first vice-president for economy (VPE): (iii) second vice-president for infrastructures (VPI); (iv) third vice-president for social affairs (VPS); and (v) fourth vice-president for political affairs (VPP), although in practice could be more useful to divide the responsibilities of government into ministries.

The methodology for selecting social, economic and political indicators depends on a series of theoretical and methodological requisites, which are consolidated here in the following three: they must be (i) relevant (theoretically significant); (ii) reliable (by means of quantitative data that reflect reality); and (iii) assumable (adapted to the polity's size and capacity).

The indicators are presented in their own units to subsequently calculate forecast and actual improvement or regression, providing information on both the deviation in percentage computed from absolute figures and the ratio between the two periods (previous and current) in the form of indices.

The PBS subdivides indicators into two major groups: outputs and inputs. The former vary as widely as polity objectives; the latter are

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characterized by a single expression: the economic outlay budgeted/effected to produce the outputs. The ultimate purpose of the PBS is to compute the T = Y/X ratio at all possible levels (overall and by area of political responsibility).

OUTPUTS (Y)

Each of the reference pattern values is measured in term of the indicators set out in the following chart where the information is highly concentrated. For instance, the first value 'Health' could use a lot of other indicators (infant mortality, hospital beds, etc.), but the objective is to avoid double information and costs. Therefore, if a polity registers a high expectancy of life, very few days lost due to illness and people are satisfied with their levels of personal health, this valued could be adequately represented.

(1) Health

- (1.1) Absenteeism due to illness, days (-)(VPS)
- (1.2) Expectancy of life (+)(VPS)
- (1.3) People's opinion of 'occupational health' (+)(VPS)

(2) Material wealth

- (2.1) Per capita Gross National Product (+)(VPE)
- (2.2) Productivity(+)(VPE)
- (2.3) Occupied housing (m2 per person)(+)(VPE)
- (2.4) Index of turim expenses (turist expenses/ turist incomes)(+)(VPE)
- (2.5) Cars CV per capita(+)(VPE)
- (2.6) People opinion of their total income(+) (VPE)
- (2.7) Kms of highway/hm2.(+)(VPI)
- (2.8) Kms. of high speed trains/km2.(+)(VPI)

(3) Security

- (3.1) Saving Economic Index(+)(G)(VPE)
- (3.2) Public Debt(-)(VPE)
- (3.3) Public Deficit(+)(VPE)
- (3.4) Labour conflictivity (lost days of work) (-)(VPS)
- (3.5) National Security Index(+)(VPP)
- (3.6) International Security Index(+)(VPP)
- (3.7) Diversification of Suppliers Index(+)(VPE)
- (3.8) Nuclear Risk coverage(+)(VPI)
- (3.9) Energetic dependency (-)(VPE)

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(3.10) People's opinion of their level of security (+)(VPP)

(4) Freedom

- (4.1) Freedom of the Press Index(+)(VPP)
- (4.2) Economic Freedom Index(+)(VPE)
- (4.3) International Freedom Index(+)(VPP)
- (4.4) Labour relations index of freedom (+)(VPS)
- (4.5) Number of political parties(+)(VPP)
- (4.6) Number of Free Trade Unions(+)(VPS)
- (4.7) Participation in political elections(+)(VPP)
- (4.8) Trade Unions membership rate(+)(VPS)
- (4.9) People's opinion of their degree of freedom in the polity(+)(VPP)

(5) Knowledge

- (5.1) Percentage of population with full university degrees(+)()(VPS)
- (5.2) Percentage of illiterate population(-) (VPS)
- (5.3) Percentage active population devoted to I + D + i(+)(VPI)
- (5.4) Subjective degree of national level of knowledge(+)(VPS)
- (5.5) Balance of payments deficit for royalties and patents (–)(VPI)
- (5.6) Scientific publications relative index (+)(VPI)

(6) Distributive justice

- (6.1) Percentage of women in Parliament (+) (VPS)
- (6.2) Percentage of women with degree of 'General' in the Army (+)(VPS)
- (6.3) Percentage of women who are 'bishop' or similar in churches (+)(VPS)
- (6.4) Percentage of women that are director of big mass media (+) (VPS)
- (6.5) Income inequality rate(-)(HR)(VPS)
- (6.6) Gender income inequality rate(-)(VPS)
- (6.7) Percentage of capital held by employees in companies(+)(VPS)
- (6.8) Percentage of employees holding company shares(+)(VPS)
- (6.9) Percentage of employee representatives on the board of big companies (+)(VPS)
- (6.10) Percentage of women who are in the board of big companies(+)(VPS)

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- (6.11) Percentage of son of workers who are in the board of big companies (+)(VPS)
- (6.12) People's opinion of equity in the country(+)(VPS)

(7) Environmental conservation

- (7.1) Percentage of landscaped surface(+) (HG)
- (7.2) Noise level Index(-)(HG)
- (7.3) Air pollution Index(-)(HG)
- (7.4) River pollution Index (-) (HG)
- (7.5) Pollutant waste emissions or spills(-) (HG)
- (7.6) Fines for pollution(-)(HG)
- (7.7) Kyoto degree of fulfilment (+)(HG)
- (7.8) Peoples's opinion regarding pollution emissions or spills(+)(HG)

(8) Quality of activities

- (8.1) Unemployment rate (-)(VPE)
- (8.2) Percentage of employees working in selfmanaged cooperatives (+)(VPS)
- (8.3) Average working hours per week(-)(VPS)
- (8.4) Percentage of employees with flexible hours (+)(VPS)
- (8.5) Percentage of part-time employees(+)(VPS)
- (8.6) Percentage of employees working overtime(-)(VPS)
- (8.7) Percentage of employees working nights or doing arduous work(–)(VPS)
- (8.8) Percentage of employees participating in management control(+)(VPS)
- (8.9) Social-workplace climate Index(+)(VPS)

(9) Prestige

- (9.1) Index of positive evaluating economic agencies(+)(VPE)
- (9.2) Percentage of GNP to development AID (+)(HG)
- (9.3) International prizes(+)(HG)
- (9.4) International fines index(-)(HG)
- (9.5) Positive current account for commercial trade (+)(VPE)
- (9.6) Number of foreign embassies in the country (+)(HG)
- (9.7) Number of embassies in foreign countries (+)(HG)
- (9.8) Multinational corporations Index in foreign countries (+)(HG)

(9.9) People's opinion about national overall prestige(+)(HG)

(10) **Power**

- (10.1) Population(+)(HG)
- (10.2) GNP (+)(VPE)
- (10.3) Contribution to UNO(+)(HG)
- (10.4) Public opinion of power in the world (+)(HG)

Inputs (X)

- (1) Budget, head of government(-)(HG)
- (2) Budget first vice-president for economy(-) (VPE)
- (3) Budget second vice-president for infrastructures(-)(VPI)
- (4) Budget third vice-president for social affairs (–)(VPS)
- (5) Budget fourth vice-president for political affairs(–)(VPP)

Note that the input indicators bear a minus sign (the less spent, the better), and they have no weighting factors inasmuch as they all refer to respective monetary unit.

The aforementioned list is just one of many samples that could be adopted. But accepting a list of indicators may be the first and foremost action taken by any government, for it involves setting the objectives to be met in a given period or, more graphically, programming the lights on the scoreboard to track and monitor political information.

Each government's list of indicators varies, naturally, depending on size, nature, problems and expectations of the polity for the future. The basic principle to bear in mind is that such lists should be meaningful, useful, simple and comprehensible for the largest possible number of people inside and sometimes outside the polity. The number of indicators should be minimized without excluding relevant information (the more meaningful the better). Nevertheless, an index as the United Nations Organization 'Human Development' ('expectancy of life'+'GNP per capita'+'education index') would represent an exaggerated and too simplified concentration of information. Other 'political performance' indicators like the one developed by Humanmetrics

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(2010) integrating 'rationality', 'authoritativeness', 'adventurousness' and 'inspiration' would not fulfil also basic systemic and sociological requirements. And the same can be said about several indexes applied to international comparisons such as the 'quality of life', 'subjective well-being', 'gross national happiness', 'genuine progress indicators' or the 'green gross domestic product'. Look for instance the important works published in the journal 'social indicators research' through its life.

Another problem to be solved in advance is the comparative importance of the different indicators. This can be done by assigning a relative weight to each (on a scale of 1–10, for instance). The result would be that a polity's overall balance sheet would no longer be a simple sum such as a+b+c ...+n, but rather that same sum, duly weighted with the respective factors or 'p': ap1+bp2+cp3+... n+pn. These items, moreover, would be summable because the indicators would have been previously standardized to index form.

It goes without saying that both operations, indicator selection and 'weight' assignment should be performed as collegiately as possible, i.e. with the participation of the government staff and even an external consultant, who might be commissioned to submit an initial proposal for consideration. Delfos methodologies for intersubjective expert agreement yield excellent results by combining different participants' points of view and even providing mathematically indisputable solutions.

The quantitative information provided by this PBS will be also used below to measure 'governmental efficiency'. The results can be subdivided by vice-presidencies or big areas of responsibility, although this is not shown in the aforementioned illustration. Results can also be expressed graphically to facilitate evaluation.

WHEN IS A GOVERNMENT EFFICIENT?

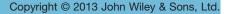
The foregoing discussion has been leading up to the key concept of this paper, 'government efficiency' (GE). 'Polity efficiency' is not the same as GE, but the author has consistently sustained that the polity cannot be efficient if the government is not efficient. Hence, the definition of GE is the final point of the present paper, the point where it will be sustained that the global social welfare provided by a country's institutions depends largely on the overall PBS attained and in turn on the government equilibrium among the different values to be performed.

Indeed, it would be to little avail for governments to engage in 'philanthropy' or reach suitable levels of so-called 'social responsibility' if by so doing, they were to jeopardize their **overall efficiency**. This concept is regarded here to be more inclusive, from a theoretical perspective, because it is based on the values/citizens matrix and systematic inter-polities comparison or benchmarking, both of cardinal importance to government durability.

Moreover, the enormous economic effort that governments need to devote, for instance to R&D+i, may prove to be incompatible with many of what may be regarded to be 'social' expenses or related items. Under such circumstances of technological disadvantage, which must be remedied to ensure overall economic development, it may be correctly sustained that governments' true contribution to a society's welfare consists in prioritizing—absolutely and above and beyond many other aspects and expenses of apparent social significance—the implementation of relevant scientific research and technological innovation programmes.

But not only do the indicators focus on the knowledge value: the entire PBS has been designed around the need for progress in innovation and new technologies, and for knowledge to flow to and from all kind of public and private institutions networks in an effort to join forces to their mutual benefit through their responses, ideas, suggestions and projects.

The concept of GE presented in this paper should, therefore, entail a series of theoretical dimensions of overall importance, whose operational definition should be highly demanding in terms of competence-related content. What this means is that governments labelled as 'efficient' under this approach (i.e. those with an overall index greater than one, as discussed in the succeeding text) will be able to ascertain that they in fact are presently and will continue to be



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efficient in the future and that such efficiency is measured with respect to relevant comparable polities. But providing an appropriate or scientifically valid answer to this question involves solving certain basic theoretical problems by appealing again to general organizations theory where the concept of 'efficiency' has provoked more interest because of the competitive nature of private business and companies. Let us expend some lines on the idea of organizational efficiency.

The first necessitates practically denying a more or less accepted hypothesis according to which the concept of 'efficiency' cannot be measured. Such a hypothesis, as formulated in the succeeding text, can be found throughout the scientific literature on the performance of organizations:

'Efficiency cannot be measured or calibrated for want of a general comparative model.' and it has been sustained by most scholars addressing the subject (Edwards *et al.*, 1986).

Nonetheless, many authors have attempted to measure organizational efficiency empirically. Miles (1980), for instance, used 29 measurements, Campbell (1977) 30 criteria, 114 variables and Seashore & Yutchtman (1967) 76 different indicators. Some authors (Dalton and Kesner, 1985) even claim that the number of possible measurements is nearly infinite, while all stress the difficulty involved in standardizing measures for comparison. Generally speaking, positions range from those (such as Goodman et al., 1983) who propose a moratorium in the analysis of organizational efficiency until better inter-subjective conditions are in place, to those who propose definitively abandoning the idea in light of the utter impossibility of every reaching agreement (such as Hannan & Freemann, 1997).

There are, naturally, authors (such as Morgan, 1980) who believe that such an agreement is not impossible or who argue that the decisive importance of the concept precludes abandonment if the aim pursued is to understand and improve business organizations (such as Peters & Waterman, 1982; Handy, 1993) and in general the total quality control movement. More recent but likewise theoretically disoriented approaches can be found in Mullins, 1996. In short, from the earliest attempts quoted previously to the most recent papers of which this author is aware such as Puig-Junoy y Dalmau (2000), or Vergés (2004) have signified important advances in the definition of the concept, the hypothetical impossibility of the endeavour may still be said to be accepted. The explicit rationale for this hypothesis is based on the lack of a general comparative model able to generate the necessary agreement among experts.

The present paper has, however, attempted to show that such a model exists, and it can be applied to polities in order to know their degree of 'efficiency', subject only to deployment of the respective effort to attain theoretical integration, thereby eroding the scientific grounds for the aforementioned hypothesis (see the reference pattern of values).

Assuming, for the time being, the existence of a valid model, the second problem consists in the broad polysemy of the term 'efficiency' itself and the equally broad overlap with other synonyms, discussed by several authors. In this regard, confusion may be said to abound among terms such as 'efficacy' (when the polity reaches its stated objectives); 'effectiveness' (when its citizens accept government results), 'efficiency' (when the government maximizes overall rationality), 'productivity' (when production is related to the population), 'success' (when the ultimate long-term ends pursued are attained), 'growth' (when turnover increases from period to period), 'development' (when certain desirable levels are reached) and so forth. Clearly, semantic chaos reigns around the term efficiency. Webster's Third International Dictionary is of scant assistance when it defines effective as 'able to accomplish a purpose' and efficiency as 'suitability for a task or purpose', i.e. essentially the same.

It may be deduced from the ideas associated with all these terms that none by itself would fully cover the idea of government's contribution to social welfare, including therein not only the idea of the attainment of the initial aims ('efficacy' for many), but also their achievement at the lowest possible cost or effort (what others call 'efficiency'), with year-on-year improvements ('advancement' or 'development') or even

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with citizens conformity with or acceptance of what is obtained (usually termed 'Effectiveness' in political science literature). What concept might encompass at least these four component principles of desirable polity behavior? The English and French term 'performance', for instance, would appear to represent a more global vision of the results of polity endeavour, but there is no true equivalent in other languages, such as Spanish.

Given the obvious need for a concept that would express the ideas of efficiency, efficacy, results and so on, from as global a perspective as possible (integrating political, economic and social aspects in the broadest possible sense, in keeping with the term 'social welfare'), perhaps the most viable solution consists in redefining some of these concepts. EFFICIENCY, for instance, would not be reduced to the almost dangerously narrow 'ends reached/means deployed' ratio but expanded to include most of the meaning of the other terms described previously. If the aforementioned question is to be answered with any rigour, polity complexities must be taken into account in all their dimensions, an undertaking that in principle is simply a matter of adding versus subtracting perspectives until an integrated presentation of the concept is attained.

The first operation would consist in re-labelling the 'ends reached/means deployed' ratio, which has been termed 'efficiency', to release this term from the confines of its current content. What might this ratio, which signifies achievement of a result pursued at low cost, effort or in other words low *energy consumption*, be called? The term *ecological* might prove to be suitable, inasmuch as the intention is to minimize such consumption. Albeit provisionally, the adjective 'ecological' might be adopted to designate polity behavior exhibiting a suitable input/output ratio. This, in short, would represent the classic output/input ratio as the essential result of any polity's or even any social system's transforming action.

Once the concept efficiency is freed of the narrowness of the aforementioned ratio, a more complex, operational and at the same time quantitative definition of GE might be advanced. Such an endeavour must be preceded by a brief introduction to an eminently sociological approach to the political system, again in keeping with the 'social welfare' concept. This provides an overview of the powerful interests that shape government activity and its functional dependence on such political parties, all of whom expect to obtain something from the government: freedom, security, public services, distribution of goods, justice and so on, at times as keenly as if such items were as essential as the very air they breathe. Like it or not, the central role of governments as the mainstay of modern society cannot be denied; nor can the dependence of social structures as a whole even if viewed from more critical and countercultural perspectives.

Taking these conceptual grounds as a point of departure, the initial question would have to be re-formulated in a more general and concrete manner: When is a government efficient? Initially, as argued previously, a government is efficient when it is simultaneously 'ecological', 'efficacious', 'effective' and 'incremental'. And it must be all these things with respect to other governments, for nothing can be said to be good/ bad, tall/short, ugly/beautiful and so on unless in comparison with some reference. A polity may be highly ecological, efficacious, effective and incremental, but the least ecological, efficacious, effective and incremental of all the polities of comparable size. The definition of the new concept calls, then, for the introduction of at least one more dimension: internal/external that compares government results with those of its comparable polities.

Although this information cannot always be readily gathered, it is becoming increasingly more accessible on the Internet where many or most of the data needed for such assessments can be obtained.

The conceptual model for GE would, therefore, be defined by the five following propositions. Table 1

All of the foregoing is based on the assumption that the set of indicators used validly operationalizes the theoretical reference pattern of values and the demands of citizens. Otherwise, the utility of the approach would have to be challenged or the approach redefined.

The GE index would, then, be formulated from the following indices:

Table 1 Government efficiency: requirements

- 1 A government is efficient only if it is ecological (attains a desirable input/output ratio).
- 2 A government is efficient only if it is efficacious (obtains what it plans to obtain).
- 3 A government is efficient only if it is effective (its results are accepted by its citizens).
- 4 A government is efficient only if it is incremental (its results are an improvement over the preceding period, i.e. the positive factors grow and the negative factors decline).
- 5 A government is efficient only if it is adapted (it is at least as ecological in its basic ratio between 'outputs' and 'inputs' as its comparable polities, on average).
- (1) Ecological dimension (T)

This is the ratio between outputs (Y) and inputs (X).

Therefore, T = Y/X,

where 'Y' is the average of the percentage improvements obtained in the 'output'

indicators and 'X' the percentage improvement in the 'input' indicator, both with respect to the preceding period.

(2) 'Efficacy' dimension (E)

This is the ratio between forecasts and achievements.

Therefore,

 $E = T\alpha/Tf$ where 'Ta' is the actual, 'Tf' is the forecast ecological dimension and ' α ' is a coefficient of imponderability.

(3) 'Effectiveness' dimension (Ef)

This is the ratio between subjective and objective.

Therefore,

Ef = Y(S)/Y(O)

where Y(S) are the outputs as perceived by citizens and Y(O) the outputs actually attained.

(4) 'Incremental' dimension (I)

This is the ratio between present and past I = (I1 + I2 + ... + In/n)

(5) where I1, I2 and so on are 'output' indicators.(6) 'Adaptation' dimension (A)

This is the ratio between the government and other comparable T

Governments. Therefore, $A = T/T\varepsilon$

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where T is the government's ecological dimension, and T ϵ is the ecological dimension corresponding to the comparable governments. Then, the GE index would be:

$$GEI = (T + E + Ef + I + A)/5$$

CONCLUSION

Once again, the foregoing principles serve no other purpose than to provide an example of its operational possibilities given that most of these indicators are available. But, in a nutshell, the message of this essay is

People create polities only because they satisfy better their needs. However, political science, as the science of organizational government, is not sufficiently concerned with measuring these degrees of satisfaction through values produced by governments, thus ending by forgetting its ultimate goal, which is to account for the collective as well as to the individual axiological efficiency. Is political science, therefore, playing its natural and even ethical role? This is the question it would be worthwhile to answer.

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