**(VII) How to apply the Viable System Model to get a fast design or diagnosis of an organization (Introduction-Part VII)**

**Pathologies related to System 1: Are we producing and delivering what we should produce and deliver? Do the operational units of the organization work in harmony among themselves, or are some of them absorbing more resources than they should from the whole? Do the operational units have excessive power in the organization?**

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1. I continue sharing some ideas taken from the Organizational Cybernetics (OC) field, with particular emphasis on the Viable System Model (VSM) that I think may be useful to any decision-taker in any organization.

VSM offers an enormous power for making a fast diagnosis of any organization. One of its strengths is that it provides a map of the complete organization, identifying all functions essential for its viability. It provides a comprehensive model of the organization.

In addition, it offers a way of seeing the whole organization at any level of its structure, no matter how big and diverse it is. It can provide a vision of our organization in a similar way that Google Earth can show any level of the geographical site we wish to see (the whole Earth, A Continent, A Country, A Region, A City, A Street, a House, etc.). We could probably call VSM something like the Google Earth of organizations.

A very detailed description of the steps I propose to apply the methodology for diagnosing an organization, or designing a new one, can be consulted in the book:

[Design and Diagnosis for Sustainable Organizations. The Viable System Method](https://link.springer.com/book/10.1007/978-3-642-22318-1)

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2. In this **seventh general post,** I will continue commenting on some of the most frequent pathologies in organizations. As I mentioned in previous posts, this knowledge is helpful for designing organizations so they are free of them (healthy) or for diagnosing an existing organization. Once we identify a pathology, we can try to eliminate it.

**In 6 previous posts (I-VI), I shared a short version of the first group of pathologies**(**I. Structural Pathologies) and started to show some of the pathologies included in the second group (II. Functional Pathologies).**

3. In the presentation I made for the **Metaphorum Group in May 2022**, I showed **the three global maps** with the more frequent **organizational pathologies.**

<https://www.youtube.com/watch?v=62mRBzRDxHI>

**Organizational Pathologies (7)**

**J. Perez Rios**

As I mentioned in previous posts, identifying a pathology is a prerequisite to prescribing any treatment for the diagnosed deficiency. With that aim, I prepared back in 2008 a taxonomy of "**Organizational pathologies**" that I am sharing. I classified the 26 ones I found widespread into three main families or groups. A very detailed description of each one of the organizational pathologies I am describing can be found in Chapter 3 of the book:

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The first group (I) includes pathologies related to organizations' structural design and how the organization copes with its total environmental complexity by creating the necessary sub-organizations. I call these Structural Pathologies.

The second group (II) includes pathologies related to the adequacy of the organizations (at all recursion levels) to the prescription made by the VSM about functional subsystems and their relations. These I call Functional Pathologies.

The third group (III) subsumes Information System and Communication Channel Pathologies.

A short exposition of the methodological approach to diagnose or design an organization as well as the list of organizational pathologies can be consulted in this paper:

[Pérez Ríos, J.](https://www.emerald.com/insight/search?q=Jos%C3%A9%20P%C3%A9rez%20R%C3%ADos) (2010), "Models of organizational cybernetics for diagnosis and design", [Kybernetes](https://www.emerald.com/insight/publication/issn/0368-492X%22%20%5Ct%20%22_blank), Vol. 39 No. 9/10, pp. 1529-1550.

<https://doi.org/10.1108/03684921011081150>

**In 6 previous posts (I-VI), I shared a short version of the first group of pathologies**(**I. Structural Pathologies) and started to show some of the pathologies included in the second group (II. Functional Pathologies).**

**The denominations used, such as System 5, System 2, etc., are typically used in Beer's Viable System Model (VSM).**

**II. Functional Pathologies (7)**

This group includes 17 pathologies related to each of the organizations that compose the entire organization. In each unit, one must check that all the essential functions (systems) necessary for the organization's viability exist and work adequately. This group includes the more frequent pathologies affecting each VSM function (systems) and the whole organization (named System 5, System 4, System 3, System 3\*, Homeostat 4-3, System 2, and System 1). In this post, I will mention the ones related to System 1.

Concerning the pathologies related to System 1 (in the VSM), some observations related to its role are convenient.

System 1 aim is to provide the products or services the organization has been designed for. It is frequently composed of various organizational units that should function harmoniously. These units may compete for the organization's shared resources and even clients or suppliers, etc., which might lead to conflict because of each one attempting to achieve its own goals (the delivery of the assigned products or services).

*An imbalance in the power exercised by any of the operating units or a System 3 that is too weak can lead to various pathologies affecting System 1.*

**Pathologies related to System 1**

After revising the functions of all the systems (Systems 2, 3, 3\*, 4, and 5) whose aim is to contribute to System 1's doing what it is supposed to do in line with the purpose of the organization, we must now check to see that System 1 has everything it needs to perform its function.

System 1 can be made up of several elementary operational units which, for example, in the case of a firm, may consist of different product lines, in a university of the various faculties, in a health system of the various health areas, or in a country of the distinct autonomous communities, etc.

From the structural point of view of the VSM, the components of each unit are always the same and consist of:

(a) the specific environment,

(b) the operational unit in the strict sense (the operations),

(c) the management of the operational unit, and

(d) the specific System 2 of each operational unit.

These four elements are connected by information channels so that information flows continuously, guaranteeing a dynamic balance between all the components; the ultimate aim is to make sure that the operational unit provides the environment with the goods or services that constitute its reason for existing, and that all of these units provide the goods or services of the organization-in-focus.

Among the pathologies that could affect System 1, I will mention the following.

**Pathologies Associated with System 1**

**PII14 Autopoietic "Beasts"**

Regarding potential pathologies related to System 1, these are mainly concerned with unsuitable activity by the elemental operational units. An example would be when one System-1 unit, or all of them, become "Autopoietic Beasts," using the term to describe organizations for which individual goals are their only reason for being, regardless of any consideration transcending their interests. System 1's operational units belong to higher units (the complete System 1 itself and the whole of the organization in focus), and consequently, their activities should be viewed within the framework of the larger whole.

An example from biology is cancer, which is caused by cells that grow and spread throughout the organism in which they are contained, pursuing their own growth and expansion, and, in so doing, finally destroying this host organism and consequently themselves.

In the case of System 1, this pathology manifests itself when one of the elemental operational units acquires or already has disproportionate domination over all the other units, which, in combination with it, constitutes System 1, producing a negative effect on the development of these other units. That, of course, will occur if System 3 lacks sufficient power to prevent pathological behavior of this kind (Fig. 1).

**PII15 Dominance of System 1. Weak Metasystem**

A further instance of the pathological development of System 1 occurs when its overall presence, power, and domination over the other functions or systems necessary for the viability of the organization (Systems 2, 3, 3\*, 4, and 5) is absolute (Fig. 1). This represents an organization dominated by the operational units of System 1, which largely unequipped with coordination elements (System 2), integrating components (System 3 and 3\*), adaptation organs (System 4 and 3–4 Homeostat), and those indicating identity, mission, etc. (System 5), will behave like a combination of operational units seeking their individual aims and competing among themselves based on "each man for himself". The outlook from the viability standpoint is not good.

**PII17 Lack of Metasystem**

Another pathology related to System 1 but referring to the entire organization stems from the absence or weakness of the Metasystem, which, we must remember, comprises Systems 3, System 4, and System 5. That may happen in organizations where, as a consequence of growth, more (or exclusive) attention has been given to developing System-1 elements; initial success with certain products or services has led the organization to focus on supplying the market with the required goods or services while paying little attention to developing its management system (Metasystem), or the functions of System 3, 4 and 5. Regarding System 3, I have already mentioned (Perez Rios, 2012) its double role as part of the System (Operations) and the Metasystem (Management). When this pathology arises, System 3 may have developed to a certain extent, but only in terms of activity related to managing and integrating System-1 elements and not to interact with System 4. This interaction of Systems 3 and System 4 is essential for guaranteeing the organization's adaptation and, consequently, its viability.

The appropriate treatment for the causes of the pathologies mentioned depends on the design of all the VSM functions, as described in Chaps. 1 and 2 of the book (Perez Rios, 2012):

[Design and Diagnosis for Sustainable Organizations. The Viable System Method](https://link.springer.com/book/10.1007/978-3-642-22318-1)

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*Figure 1: Functional Pathologies. Pathologies related to System 1.*