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## Organizational Diseases

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### ABSTRACT

The current work contributes to the understanding of the organizational phenomenon, from healthy organizations point of view. These were defined in previous works, such as those that are in a state of complete structural, strategic and social well-being, with capacity for adaptation and development, and not only in absence of disease. It is proposed here, in addition, a definition of organizational disease, using as methodological operator the concept of Ashby's functional homomorphism, from the allopathic human disease. As an example, organizational homomorphisms are developed for three major human diseases.

### KEYWORDS

cybernetic homomorphism;  
Diseased organizations;  
healthy organizations

## Introduction

Multiple metaphors have been used and continue to be used to get a better comprehension of organizations, thereby contributing to understand their nature, structure, and operation. There is no single way of understanding organizations, but rather the different ways or metaphors through which we think, help us explain and comprehend them, without exhausting their conceptual richness: *“the ideas on organizations are always based on implicit images or metaphors that make us see, understand, and manage situations in a particular way”* (Morgan 1999, p. 25).

In agreement with this, Tarride et al. (2008) and Tarride and González (2014) constructed a model of healthy organizations and a method for their evaluation, using as a metaphor the way in which allopathic physicians make a diagnosis of the healthy/diseased condition of a person.

To that end use is made of the definition of people's health of the World Health Organization (WHO) as a *“state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”*, adding that it is the *“ability to develop one's own personal potential and respond in a positive way to environmental challenges.”* Based on this, a healthy

organization was defined as a “*system of human activity in a state of complete structural, strategic, and social well-being, and with the capacity for adaptation and development*” (Tarride and González 2014, pp. 229).

The similarity between human beings and organizations, as well as between the physician/patient and analyst/organization system, is based on Ashby’s idea of functional homomorphism (1956), i.e., it takes care of the functions that each one performs, finding their similarities. Therefore, the diagnosis of the state of health of an organization is made in a manner similar to that by which a physician determines the state of health of a person.

But saying that a person is or is not healthy is not the only thing that is derived from the physician’s judgement. He is capable of stating, if such is the case, what is the ailment of that person, making a diagnosis and proposing a treatment for the detected illness. The same should take place in the analyst/organization relation, i.e., once the state of health of the organization has been determined, the analyst should be capable of specifying a diagnosis and recommending a treatment. This sets the starting point of this paper’s motivation: to diagnose organizational ailments, give them a name, and offer a treatment to overcome them.

Here an inquiry is made, from the perspective of the human diseases and treatments, on possible organizational ailments that can be identified through their symptoms and treated consequently, making use of the concept of functional homomorphism.

From the physician’s standpoint, giving an adequate specific treatment requires necessarily recognizing which is the ailment that the patient is suffering, since if the disease is not well identified, the treatment can hardly heal it. Similarly, in the case of an organization, if the analyst is unable to identify the problem that his organization has, the measures taken and the decisions made may not remove the ailment.

A general homomorphism between a human and an organizational disease is made, and the latter is defined. Then, using as a starting point the assumption that organizations suffer the same kinds of diseases as human beings from the standpoint of both morbidity and mortality, three specific homomorphisms are proposed taking as reference those that affect people most frequently.

## **Organizational Disease**

As stated earlier, in 1946 the WHO defined the health of people as the complete state of physical, mental and social well-being, and not only as the absence of disorders or diseases, a definition according to which it is possible to not suffer from any disease but yet not be in that state, which we shall call ‘healthy’, and this would happen from not having that

complete state of physical, mental and social well-being. Therefore, the opposite of healthy would be 'not healthy', while the opposite of ill would be called 'not ill'. Notice that not being ill is a necessary but not sufficient condition for being healthy. Of course, someone who is ill is not healthy, so we can distinguish that the antagonistic-complementary 'not ill/ill' macro-concept would be contained in the antagonistic-complementary 'healthy/not healthy' macro-concept, with completely diffuse boundaries, while the distance between being not ill and healthy would be given by the concept of well-being, that can be understood as 'living well, at ease' (RAE, 2013), allowing human beings to develop their potential.

Therefore, considering people as healthy requires them to be not ill and at the same time show the capacity to develop their potential, so it is not enough to be not ill. Notice that there can also be ill persons who show the capacity for developing their potential; think of a chronically ill person with a great capacity to face environmental adversities. The extreme is to be ill and not show adaptation capacities.

Years later the WHO refined its definition of health considering it as "*the extent to which an individual or group is able to realize aspirations and satisfy needs, and to change or cope with the environment. Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and personal resources, as well as physical capacities*" (WHO 1984). Therefore, health can be seen as an unstable equilibrium situation that is part of this permanent adjustment dynamics that allows human beings at some times to be in harmony with their environment.

Within this framework, it must be specified that the interest is placed here in the concept of illness, in opposition to what is not ill, assuming the slips that the diffuse boundaries could cause.

The concept of health has been the object of study in various fields of knowledge such as philosophy, sociology, psychology, and certainly medicine, both in its scientific and traditional streams. Consequently, this has caused the concept of disease not to have a single meaning. Etymologically, the word infirmity comes from the Latin expression *infirmus*, whose root is *firmus*, which means firm, solid, robust, and the prefix *in*, which means a negation of the above. So *infirmus* should be understood as lacking firmness, solidity or robustness. According to Oxford's British and World English Dictionary, *infirm* refers to "*not physically or mentally strong, especially through age or illness*" (Oxford 2016).

According to Dorland's Illustrated Medical Dictionary (1994), disease is "*any deviation from or interruption of the normal structure or function of a part, organ, or system of the body as manifested by characteristic symptoms and signs; the etiology, pathology, and prognosis may be known or unknown.*"

Stedman's Medical Dictionary (1995) understands by disease "*an interruption, cessation, or disorder of a body, system, or organ structure or function. A morbid entity ordinarily characterized by two or more of the following criteria: recognized etiologic agent(s), identifiable group of signs and symptoms, or consistent anatomic alterations.*"

Taber's Cyclopedic Medical Dictionary (2013), understands disease as "*a condition marked by subjective complaints, a specific history, clinical signs and symptoms, and laboratory or radiographic findings. Disease and illness differ in that disease is usually objective and tangible or measurable, whereas illness (and associated pain, suffering, or distress) is subjective and personal. Thus, a person may be a serious but symptom-free disease (such as hypertension) without illness. Conversely, a person may be extremely ill (such a with post-traumatic stress disorder) but have no obvious evidence of disease.*"

Susser (1973) adds to the distinctions between disease and illness, sickness, which refers to a conception of social health and has a cultural foundation; it may influence the way the patient reacts, how he perceives and presents his symptoms, and how the limits of normality are established.

From these definitions it is possible to refer to disease as the manifestation of an alteration and/or interruption and/or disorder and/or cessation and/or deviation and/or structural and/or functional weakness of some part, organ and/or system of the body that is expressed through signs and symptoms that are or are not measurable, including suffering, pain, and/or anguish among the latter.

So if we consider the concepts of alteration, disorder, and deviation as similar, the same as interruption and cessation, then a disease would be an alteration and/or cessation and/or structural and/or functional weakness, of components and/or systems of an organization, that is expressed through signs and symptoms that are or are not measurable, with suffering, pain, and/or anguish among the latter.

In turn, according to Goic, Chamorro, and Reyes (2010) it is possible to establish a difference between the concepts of symptoms and signs. The former are defined as subjective manifestations of disease, i.e., those that are perceived solely by the patient and the physician can discover only by questioning, while the signs are objective expressions of disease that can also appear during the physician's questioning, at which time the patient becomes aware of their presence; but most of the signs are not observed by the patient and they are discovered only through examination, including physical examination.

Notice that the disease is an emergent property which appears when the subjects become aware of the symptoms that affect them and a social representative -the physician- sanctions it as such.

In agreement with this, it is possible to understand disease in human beings as an alteration, cessation, and/or structural and/or functional weakness of some part, organ, and/or system of the body that is expressed through signs and symptoms and is sanctioned by a physician.

It is therefore possible to define an organizational disease as an ‘alteration, cessation, and/or structural and/or functional weakness of components and/or systems of an organization that is expressed through signs and symptoms and is sanctioned by a specialist in organizations’; where the symptoms will be understood as ailments perceived by the components of the organization and which the organizational analyst receives as data during the collection of information, while the signs refer to objective manifestations of ailments that are discovered through the tests made by the specialist in organizations.

### **General Homomorphisms between Human and Organizational Diseases**

At present the WHO uses the International Classification of Diseases [ICD-10] to organize the diseases and other health problems of people in 22 groups. But it also uses, to present the information on the main causes of death that affect the population, three large groups of diseases: communicable, non-communicable, and traumas. According to the data for 2012, 67.83% of the deaths in the world were due to non-communicable diseases, 22.96% to transmissible, and 9.21% to traumas (WHO 2012).

This last classification was considered useful as a starting point to propose the following three general homomorphisms of organizational diseases and then deal with the specific homomorphisms with those diseases that kill most people.

### **Communicable Organizational Diseases**

According to the Pan American Health Organization (PAHO), a communicable disease (CD) “*an illness due to a specific infectious agent or its toxic products that arises through transmission of that agent or its products from an infected person, animal or inanimate reservoir to a susceptible host; either directly or indirectly through an intermediate plant or animal host, vector or the inanimate environment*” (OPS 2011, pp. 11). In the organization, the communicable disease should also be the result of the interaction between the host, the infectious agent, and the environment. The host would be the organization, the infectious agents would be all the living beings or their products that can affect the organization unfavorably, while the environment would correspond to everything in which the organization is framed and does not belong to it.

It should be pointed out that the CDs belong to the group of infectious diseases, which also contains non-communicables; in other words, not all infectious diseases are communicable. This means that an infectious disease can be manifested in a human being due to endogenous causes from the existence of opportunistic microorganisms that live in symbiosis with the human body, so that when the individual's internal normality conditions are altered, the disease appears. Otherwise, their role is favorable to human beings.

In agreement with the above, if the organization is essentially defined as a set of persons coordinated to achieve a given end, then none of them play the role of an infectious agent. However, any persons strange to the organization who live in symbiosis with it can be seen as such due to the fact of not belonging to the organization, even though they are beneficial to it. For example, workers subcontracted through other companies to do some specific work such as cleaning, accounting, marketing, even primary tasks like production, or without any formal link with the organization, but provide goods and/or services to the members of the organization, such as traveling salesmen or automobile washers. In both cases there can be a positive effect for the organization, provided some limits are not surpassed, because beyond them the organizational disease would appear.

The organizational infectious agents can be seen as all external factors to it whose actions affect it, unleashing situations that put in doubt its viability. Among those that fulfill this characteristic we recognize interest groups or stakeholders who exert direct influence on the activities of the organization, which has to adapt continuously to them. Among the exogenous agents we find suppliers, since their decisions can affect the operation of a company and even make it extensive to other companies, like, for example, an unexpected price increase of raw materials; competitors, the same as in the previous case, since a decision to change prices can give rise to a 'run' that affects the companies in the same field; consumers, since they can infect one or more organizations with their purchasing decisions; the media, by diffusing information that affects the prestige of an organization and then spreads to companies in the field; financial institutions, which through their decisions harm one or more organizations; government agencies, which by implementing a policy end up harming the operation of some organizations; Labor associations, which by deciding an unexpected increase in the cost of Labor, for example, affect a set of companies in one or more fields; special interest groups, such as defenders of the environment or others.

Because the emphasis in the definition of infectious agents in organizations is based on the direct action of some groups, it is held that there will

be an organizational infection when the decisions/actions of these interest groups exceed their regulating mechanisms, harming the organizations.

### ***Non-Communicable Organizational Diseases***

According to the WHO, non-communicable diseases (NCDs), also known as chronic diseases in human beings, are those in which an etiology or infectious agent is recognized, but where the external environment plays a role. They are not transmitted from person to person, they are of long duration, and are characterized by the long time required for them to be established (WHO 2013). The development of the disease is often due to unknown reasons. However, future suffering these diseases has been related to genetic and risk factors, which once known allow contributing to their prevention, decreasing the probability of the appearance of the pathology. Some of these factors are tobacco use, the harmful use of alcohol, unhealthy diets, physical inactivity, and low cultural/educational and income level, among others. These are diseases that manifest in persons through functional and/or structural alterations at the cellular level, as well as in organs and systems of the human body (WHO 2013).

In organizations, the NCDs would be those that take a long time to become established in a gradual and continuous way, with no participation of an infectious agent or transmission between organizations. The same as in human beings, they manifest as functional and/or structural alterations at the level of persons and systems that constitute the organization. An example of this kind of disease would be the deterioration of the Labor climate, since it occurs in a gradual and continuous manner caused by internal conditioning factors. Some of these risk factors can be different income levels among the employees, inequity in the distribution of incentives, abusive use of internal competitiveness, poor knowledge management, among others.

In particular, the presence of these diseases in organizations is conditioned by the role played by the environment, such as, for example, the socioeconomic situation of the country in which they are, having more or less possibilities of providing treatment depending on the social and economic policies according to which they develop.

### ***Organizational Trauma***

The definition of trauma in medicine is related to “*injury of organs or tissues by external mechanical actions*” (RAE 2016). As shown by this definition, trauma is caused by an external mechanical action and is not due to an infectious agent as in the case of CDs. Likewise, it does not comply



with the characteristics of an NCD because it is sudden, fast, and it does not occur in a gradual and continuous manner. However, they coincide with the NCDs in that they are linked with risk factors or conditions.

The trauma affects directly the person's body, causing physical injuries at the level of tissues, organs, systems and, the same as in any other disease, there can be secondary effects that can affect the mental and/or social dimension of the person involved.

The mechanical action takes place between the human being and some external agent that can or can not be inert, such as for example a human being or a material object. The recognition of what exerts the mechanical action allows taking preventive actions, while the distinction of the intentionality allows qualifying it as violence if it is deliberate and accident if it is not.

The injuries can be of various magnitudes, depending on how much force is involved in the action and the state in which the subject was at that instant; persons who are physically more vulnerable can suffer more serious injuries than others in better physical state subjected to the same mechanical action.

According to the above it is possible to point out that the functional homomorphism of the organizational trauma would correspond to a damage that affects directly its structural dimension, produced by an external physical agent in an unforeseen and not deliberate manner. It affects the normal operation of the organization and can harm any of its components or systems. The action occurs due to changes in the environmental conditions, or to actions of the organization itself, affecting it at one time, not permanently. The extent to which this event damages the organization will depend on the intensity of the action and on how well prepared the organization is to face it.

It is possible to represent the external agent that causes the trauma by any institution, enterprise, or situation that can affect the organization's normal operation. The main external agents are suppliers, clients, financial institutions, competitors, government and agencies, and means of communication, among others. The mechanical actions that these external agents can carry out in the organization are multiple. For example, if a large client of a company has insolvency problems, this will affect its payment deadlines, and the company will find itself with unexpected financial problems. Similarly, an economic crisis in a country can drag the firms into operational problems and even lead them to disintegration. Each of these situations, in turn, can be studied in order to qualify it as accident or violence.

As already stated, there is also a possibility that the trauma is caused by the organization through its own acts, reaching, as an extreme case,

organizational suicide; we can think, for example, of an intentional bankruptcy with the purpose of covering other events.

Some trauma can be avoided, but there will always be a setting that will affect the company's operation. What is important in these cases is to have a sufficiently robust organization that allows it to regulate the environmental variety.

### **Specific Homomorphisms between Human and Organizational Diseases**

The large number of human diseases that are currently known makes it impossible to deal with all of them, so some homomorphisms are developed as examples for specific diseases, assuming that organizations would be affected by the same diseases as people. Therefore, three homomorphisms are now proposed between human and organizational diseases, chosen after considering the following two factors: first, the classification into communicable and non-communicable diseases, and trauma; and second, those that affect and/or kill most people, using for this purpose the statistics of the WHO and its Global Burden of Disease (GBD) of 2010.

Among the communicable diseases with longest Disability Adjusted Life Years (DALY) and with the highest mortality in the world we find the Infectious Diseases of the Lower Respiratory Tract, the most important of which is Pneumonia. Similarly, Ischemic Cardiopathy was selected among the non-communicable diseases, and Traffic Accidents among the traumas.

#### ***Organizational Pneumonia***

According to Tierney, McPhee, and Papadakis (2006), the lower respiratory tract infectious diseases are pneumonia, pulmonary tuberculosis, and pulmonary diseases caused by nontuberculous mycobacteria. Of these three, pneumonia is the most frequent and mortal disease, making it the main cause of children's deaths in the whole world: 922,000 in 2015 (WHO 2015).

Pneumonia is generally defined as an inflammation and infection of the lungs. It appears when the immune system fails in preventing the germs that we breathe from entering the lungs. After the inflammation, the lung tissues are infected, getting filled with pus and other liquids that hinder their normal functioning and make it difficult for oxygen to get to the blood. The main symptoms of pneumonia are fever, cough, and dyspnea (Tierney, McPhee, and Papadakis 2006).

As explained by Thibodeau and Patton (2007), the function of the lungs is to take the air that comes from the upper respiratory tract through the ducts of the bronchial tree and pass it through the alveoli to the blood

capillaries, where the gas exchange with the blood takes place, i.e., giving it oxygen and removing carbon dioxide from it.

Consequently, the respiratory system has been linked with the functions marketing, commercializing, and finances of an organization (Tarride et al., 2008) (Tarride and González 2014). Capturing oxygen from the environment is homologated with the marketing and commercializing functions, understood as those that are in charge of carrying out the exchange activities with the market, leading to supplying economic resources (money) to the organization, while the finances are in charge of receiving those resources and assigning them efficiently to the various uses that they are given in the organization, e.g., distribution of dividends to shareholders, payments to creditors, amortization of credits, investments, purchasing raw materials, remunerations, and any other expenses belonging to the company's activities (Massons 2002) (Illanes 2003).

Pneumonia inflames lung tissues, hindering their gas exchange and disturbing the passage of oxygen to the blood and of carbon dioxide from the blood to the lungs. The inflammation of the lungs occurs as a defensive response of the immune system which faces the contaminants that enter the lower respiratory tract.

So if the function of the immune system in the organization lies in the people that constitute it as they exert their ability to distinguish who are or are not part of it, and the organizational lung inflammation corresponds to the action that the people exert after an external agent affects the marketing and commercialization functions Tarride et al. (2008) and Tarride and González (2014), then the organizational pneumonia would manifest itself when an external interest group acts on it, passing over the persons, regulations, standards and policies, attacking the marketing and commercialization functions and therefore affecting the internal resource assignment tasks.

Credit and collection problems can cause an organizational pneumonia if they affect the company significantly. For example, if the company needs to get an important bank credit to increase its available capacity, then the bank affects the company directly or indirectly, so it makes changes in the assignment of the internal resources in order to guarantee the payment of the debt. Similarly, if a company's key supplier decides to decrease the collection periods of its clients, the company in question will be affected and must modify the way in which it assigns its resources in order to be able to respond on time to the payments to its supplier. And if key clients of the company require increasing the payment periods, this will also affect it, and it must adjust its working capital to back the production costs before getting the clients invoicing.

It must be pointed out that the external agent must affect the organization significantly, otherwise there would be no pneumonia, but only an

occasional discomfort in the marketing, commercialization, and financial functions that should heal rapidly.

In brief, organizational pneumonia manifests when an external interest group acts directly on the company, overcoming its organizational immunological barriers (persons, regulations, standards, policies), attacking its marketing, commercialization, and finance areas, affecting mainly the internal assignment of resources. It is characterized by an increased Labor activity in these areas. It is suggested to monitor regularly the measurement of Labor stress, respect of work hours, overtime, absenteeism, employee satisfaction, personal goal achievement, and employee productivity, among others. It is expressed through faults in the availability of marketing and commercialization information, for which it is recommended to monitor regularly sales analysis, market share, ratio of expenses to sales, financial indicators, product profitability by area, by client, and by market segment, efficacy of the sales forces, of publicity, of promotions and distribution, marketing efficiency and excellence, and the company's social responsibility. There are also faults in commercializing management, suggesting taking care of the percentage of marketing expenses in relation to sales, salesmen with respect to sales, publicity with respect to sales, sales promotion with respect to total sales, market research with respect to sales.

### **Organizational Ischemic Cardiopathy**

Ischemia is “*an inadequate blood supply to an organ or part of the body, especially the heart muscles*” (Oxford 2016). More specifically, McPhee and Ganong (2007) point out that it is produced when the oxygen demand increases with respect to the maximum supply delivered by the blood, or else when there is an absolute decrease of the oxygen supply.

Concomitantly, Kumar, Abbas, and Fausto (2005) describe ischemic cardiopathy (or coronary cardiopathy) as a group of syndromes where most of the clinical cases are due to a decrease of the blood flow in the heart. For example, intoxication by carbon monoxide and anemia can produce ischemia, but most are produced by abnormalities in the coronary arteries, in particular by atherosclerotic disease, on which we will now concentrate.

Atherosclerotic ischemic cardiopathy consists of a plate composed of fats, cholesterol, and other substances that is deposited in the arteries of the human heart, narrowing them and in this way hindering the proper oxygenation of the heart by the blood flow. This narrowing can generate blood clots that block blood circulation totally or partially. This can produce pains or temporary discomfort in the chest -angina-, dyspnea, arrhythmias, even myocardial infarction that can cause death.

In general, atherosclerosis is asymptomatic; the subject does not perceive any symptoms, even if the disease is present, until complications arise as a consequence of it. These can be of different kinds depending on the arteries where the blood flow reduction occurs and on the part of the body that is being affected (McPhee and Ganong 2007).

From the organizational standpoint, the function of the blood flow in the human body can be equated with the logistics function of an organization (Tarride et al. 2008) (Tarride and González 2014). In both cases, the flow transports, stores, and moves materials or products that nourish the basic components of the system, providing continuity to its operation. It also has the function of extracting those elements that must be eliminated from the organism. A company's logistics ensures that each of its components gets the elements needed to perform its function correctly.

The fat deposits that obstruct the blood flow in the human body can be equated with abnormal inventories that are located in inadequate places in an organization; they would correspond to raw materials reserves, input supplies, products that are being processed or are finished, in order to protect from cost increases, faults in the production rhythms, or future expectations of sale price increases of finished products. Certainly, fats are necessary for the organism, the same as it is for the organization, but it becomes harmful when it exceeds acceptable levels or is placed in inappropriate places.

Therefore, organizational atherosclerosis would correspond to inappropriate storage of inventories in places that affect the logistic flow, giving rise to bottlenecks -atheromas- and the availability of cash in the company.

In agreement with the above, the signs of organizational atherosclerosis would be increased work load keeping the available capacity; lack of liquidity for logistics management; and changes and irregular rhythms in the operations due to weaknesses in the planning and programming of production processes. The first sign may be seen by paying special attention to indicators such as number of extra hours, productivity, and employee turnover, among others. For the second, use can be made of indicators of the volume of supplies purchases, available inventories, deadlines for payments to suppliers and of collectable accounts, and current solvency, among others. For the third and last signs it is suggested to use, for example, the degree of compliance with the production goals.

### ***Organizational Traffic Accident***

A traffic accident can be understood to be every eventual, abnormal event produced on a road by a pedestrian or a vehicle driven mechanically or by animals, that harms persons and/or things (Silva 1995, pp. 463-464).

Among the different traffic accidents we find collisions, which refer to the impact produced between two or more moving vehicles; crashes, interaction between a moving vehicle and a stationary object; and running over, when a vehicle impacts a pedestrian.

If we consider that the main function of a vehicle is to facilitate the displacement of these persons, transport them, take them to the desired place, then for an organization this function may be equated with all those resources, external to the organization, that comply with transporting them and taking them to the desired place. We therefore think of consultant-ships, advising, both strategic and operational, that allow changing the position of the organization according to the environment in which it is found. It is in this process of change where accidents would take place.

In the case of a collision, the homomorphism can be established when two or more companies that hired consulting services independently from one another to go to a certain destination, end up impacting each other through a violent and unexpected action that damages them. The effect of the impact will depend on its strength. So there could be very slight injuries, or either both or one of them may disappear if the violent action is very strong. An example of a collision can be seen when two companies start a price war after having received the corresponding technological advice to decrease their production costs.

In running over, the homomorphism is similar to that of the previous case, with the difference that while one organization is getting advisory services, the other one, which receives the impact, is not. Clearly, the violent action is exerted on the organization that is not getting the advising and is unprotected.

For the crash, we would be dealing with an organization that hires advisory services, and the recommendations made by it are not only of no good to it, but they damage it by impacting with some other system of its environment. The organization performs a violent action on itself as a consequence of the advising, and damages third parties. Think, for example, of an organization ill advised by a consultant on tax matters that ends up being fined by the tax collecting institution.

In any of these three cases, the consequences of the violent action will depend on how well prepared the organization is to face the disturbances of its environment. The ability to design and install quality regulating mechanisms is fundamental for organizational viability. In this context, weaker companies -of smaller size and amount of resources- may be more highly exposed than others to poorly carried out advising.

Keep in mind also that traffic accidents are involuntary events, and therefore so are organizational accidents. Otherwise, i.e., if they are voluntary, the event must be qualified as 'violence'; for example, a price war, as a voluntary act, is a violent event.

## Comments

The view provided by the human being-organization metaphor constitutes a powerful resource for studying organizations that produce goods and services; all we need is to recall the excellent work of Beer (1972, 1979). Under this inspiration, we have been going through and constructing a road that allows us to establish what is understood by a healthy and an ill organization.

In particular, organizational disease has been defined here as an alteration, cessation and/or structural and/or functional weakness of components and/or systems of an organization that is expressed through signs and symptoms, where the symptoms are understood as ailments perceived by the components of the organization and the external organizational analyst receives as data when gathering information, while the signs refer to objective manifestations of ailments that are discovered through the tests applied to the organization

This concept of organizational disease that has been proposed presents the same difficulties as in human beings, with questions such as normality/pathology, knowledge/ignorance, individual/society, objectivity/subjectivity, among others, give the concept and its application a complexity difficult to approach. However, it is considered as a starting point for the development of the discussions on organizational health/disease, which must be revised, corrected, and improved.

Using as a basis the classification of human diseases into communicable, not-communicable, and trauma, together with the assumption that the organizations would suffer from the same ailments that affect people, the exercise of identifying and modeling pneumonia, atherosclerotic ischemic cardiopathy, and traffic accidents was developed.

Organizational pneumonia is understood as that affection produced when an interest group foreign to the company exceeds its personnel and its internal regulations and policies, altering the marketing and commercialization functions, as well as the assignment of internal resources that correspond to finances. Especially through these credit and collection areas the pathogenic agent, represented by the decisions made by the suppliers, clients and financiers, can find its way into the company, affecting the assignment of resources to the rest of the organization.

The organizational ischemic cardiopathy would correspond to an increase of the normal stock level located in inappropriate places, raw materials as well as supplies, products being processed and finished, an increase that occurs gradually and step by step, generating difficulties in the company's logistic flow and causing a lower cash circulation. This deterioration affects directly the viability of the organization, since it challenges its production system, and if we consider the lack of demand as the

main possible cause of the accumulation and poor location of stock, then we are in the presence of one of the main causes of organizational death, which is the absence of market for the generated product.

An organizational traffic accident would occur when a company is advised by a third party -consultantship-, and is damaged unexpectedly due to the solutions offered by the advisors, an event that would also affect other organizations.

In spite of the above, it is pointed out that the functional homomorphisms established here are certainly not unique and can be restated.

Finally, it is noted that the present paper is involved in the search for new ways of understanding and taking care of organizational problems, making use of the possibility of establishing similarities between what happens to human beings and to organizations. Specifically, it is considered of interest to set up in the future other homomorphisms for other specific diseases as well as for their treatments and to establish similarities between preventive and promotion aspects of human and organizational health, contributing to enrich both the conceptualization and organizational intervention processes.

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