The Dynamics of the Organizational Culture
in a Municipality

Francesco Ceresia
Department of European Studies and International Integration
University of Palermo (Italy)
fceresia@alice.it

Abstract

Although the organizational culture is one of the main issue of organizational studies, very few research has tried to explore the organizational culture change process through a systemic and dynamics perspective. This paper explore the dynamics of the organizational culture in a municipality over time, trying to show that: (1) the dynamics of the four typologies of organizational culture in the municipality can be better described and explained through a causal loop diagram, that allows to put on evidence the hidden structure (feedback loop structure) responsible for the dynamics of the considered phenomenon; (2) the process of the cultural change in an organization is characterized by nonlinear dynamics; (3) a programme of change management focused on organizational culture in such municipality is be significantly affected by the role of the information delay that characterizes the relationship between the exogenous and endogenous variables of the system at a organizational level of analysis; (4) the efficacy of the policies adopted by the management of the municipality could be widely reduced if they don't take into account the feedback loop structure underlying the organizational culture dynamics over time.

1. Introduction

Organizational culture can be defined as the set of beliefs and tacit assumptions shared by a worker's group, depending on the experiences and successes recorded within their organization (Schein, 1990).
The studies and the researches on organizational culture have been focused on two different aspects:

- what is organizational culture and its relevance for understanding the organizational phenomena (Schein, 1992, 1996);
- how to apply such knowledge in order to expedite and facilitate the process of organizational change (Schein, 1999).

Several authors have tried to identify some different typologies of organizational values that could describe the culture of an organization. According to the researchers who adopt this approach, that it could be called "factorial approach" since each of the typologies identified could be seen as a factor of a multi-factorial organizational culture,

organizational culture can be measured by questionnaires that explore each of the typologies of organizational culture described in their theoretical model (Cameron & Quinn, 1999; Schneider, 1994; Enriquez, 1970; House et al., 1999; O'Toole, 1985; Quinn & McGrath, 1985; Wallach, 1983).

However, other researchers have highlighted the difficulty of reliably exploring the organizational culture through a set of previously established values. According to these authors, in fact, the organizational culture takes many forms and connotations that are quite specific to a specific organization that built it, showing as the only methodology that can allows us to explore the organizational culture is the qualitative one (Schein, 1999). Another field of research has focused its attention on the existence of different subcultures within the same organization, where each of them express values and beliefs that, in some cases, can be really antithetical. Indeed, it has been suggested that the seemingly monolithic concept of organizational culture must be replaced by a triadic cultural model where it's possible to identify three different types of subcultures: the reinforced, the orthogonal, and the counterculture one (Martin & Siehl, 1983).

While the reinforced subculture aims to reinforce the values expressed by the dominant culture, the orthogonal subculture expresses values that, although they are different from those expressed by the dominant culture, don't appear inconsistent with the first one. Instead, the counterculture subculture expresses values that are in open conflict with those expressed by the dominant culture, creating a potential conflict that doesn't necessarily determine an explicit breaking of relations between the components of the groups who adhere to these different subcultures (Gregory, 1983).

2. The dynamic of organizational culture in a municipality.

In a recent research conducted on 107 managers of the municipality (one of the top 5 municipality of the country per population), the Author (2010) has outlined that the values composing the organizational culture:
- are jointed in constructs that postpone to some typologies already explored in the studies concerning organizational cultures;
- behave as stable elements of that same typology of culture, also when, time passes, their intensity seems modified;
- are clustered in different typologies (construct or factors) which intensity change over time, compared to their different ability to keep on guaranteeing the success of the organization, according the Schein's assumptions (Schein, 1996).

More in details, the first issue assumes that the qualitative exploration of organizational culture - through the methodology proposed by Schein (1999) - allows the emergence of its deeper dimensions (tacit and shared assumptions) that, rather than behaving as independent values from each others, they aggregate each others into some macro-factors that lead, to the meaning of the values that they saturate, some of the typologies of organizational cultures already known in the scientific literature on organizational culture. This hypothesis could be viewed as an attempt to integrate the quantitative and qualitative approach of organizational culture.

The second issue assumes that the typologies emerged as a result of the analysis of organizational culture are made up of clusters of values that remain stable over time, even though these typologies may change in intensity (defined as a level of workers' adherence toward organizational values) over time. In this case, we can observe a slow

abandonment of the dominant typologies of organizational cultures, which begin to lose their dominance to the detriment of other ones that in the past, although being perceived in the organization, exerted a low effect on organizational behaviour.

The third issue, finally, indicates that the organization could reassess and redefine its own organizational culture if it begins to ensure no more success for the organization, as suggested by Schein (1999). From this point of view, the inability of the organizational culture of allowing workers to achieve success, it is assumed as the main factor triggering the complex process that characterizes the attempt to change it.

The figure 1 shows the average values of the four emerged typologies of organizational cultures, and the results of multivariate analysis of variance confirmed the hypothesis that the emerged typologies of organizational cultures in that organization change their intensity over time[1].

Figure 1. Average values of the emerged four typologies of organizational culture (N = 107).

---
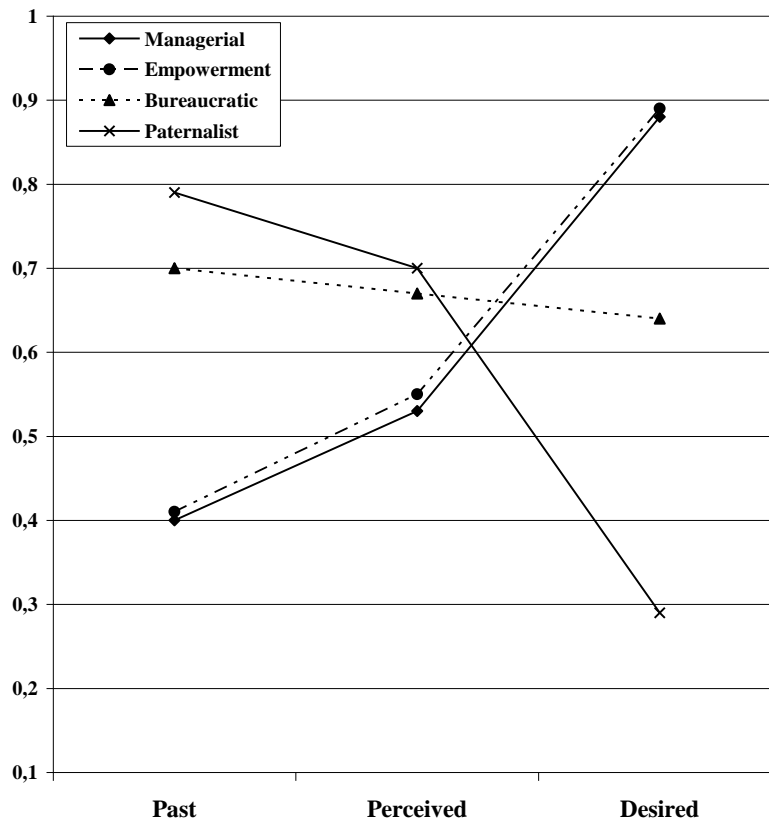
[1] The items was measured on a five-point Likert scale (1 = very little, 5 = very much). The questionnaire was administered three times to the respondents with the following different hints:
- indicate to what extent the following values are actually shared by you" (desired organizational culture)
- indicate to what extent do you think the following values have been shared in your organization in the past - up to 3 years ago (organizational culture in the past)
- indicate to what extent do you think the following values are now shared in your organization (perceived organizational culture)

Table 1. Mean differences of the emerged organizational culture (n = 107).

Organizational Culture	Foci			
	Past	Perceived	Desired	F Univariate
Managerial	0,41a	0,55e	0,88i	440,01**
Bureaucratic	0,70b	0,67bf	0,65fl	5,37*
Paternalistic	0,78c	0,70g	0,29m	404,66**
Empowerment	0,42ad	0,56eh	0,89in	337,85**

F (107, 3) Multivariate = 4825,31**; * p < .01; ** p < .001
Note: The average values have been normalized to 1.
The difference between means labeled with the same letter are not statistically significant
at p < .05 (Tukey HSD Test).

The four emerged typologies of organizational cultures have been labelled as follows:
- "managerial culture": it shows values that refer to management activities in accordance with the principles of efficiency and effectiveness, giving individuals responsibility and autonomy in managing their work and seek commitment in the management of work activities. The feeling is that this cultural approach may facilitate organization, work groups and individuals in reaching their goals. An example value of this factor is: "people should have autonomy in managing their work to give a sense of responsibility to the results they achieve".
- "bureaucratic culture": it shows values that refer to the need to strictly observe the formal regulations in order to maintain the efficiency of organizational practice. An example value of this factor is: "workers must be limited to compliance with the norms and formal rules".
- "paternalistic culture": it shows values that refer to the importance of ensure that, within the organization, informal groups can wield a parallel power to the hierarchical-functional one, indeed were the last one often enter into conflict with the first one. Membership is just a value, and to respect the rules of own group is a duty. An example value of this factor is: "within the organization, we have a duty to protect the interests of those who make part of our informal group."
- "empowerment culture": it shows values that refer to the need to break down the rigid barriers to internal communication, the importance of making decisions after an appropriate comparison between stakeholders, to ensure maximum consensus around the decision, to develop the skills of staff through training to increase the lever-making capacities of individuals. An example value of this factor is: "Communication must be seamless between all levels of ' organization".

The hypothesis that the different typologies of organizational culture change their intensity over time, according to their different ability to continue ensuring the success of the organization, has been confirmed by the results obtained by multivariate analysis of variance of organizational cultures on the basis of the three considered foci (tab. 1). For a more detailed analysis of the results of this paper, see Author (2010).

2. Objective of the present paper

The main aim of this paper is to explore the process of cultural change in the municipality. Adopting the system dynamics approach, this paper wants to show that:

- the dynamics of the four typologies of organizational culture in the municipality can be better described and explained through a causal loop diagram, that allows to put on evidence the hidden structure (feedback loop structure) responsible for the dynamics of the considered phenomenon;
- the process of the cultural change in an organization is characterized by nonlinear dynamics;
- a programme of change management focused on organizational culture in such municipality is be significantly affected by the role of the information delay that characterizes the relationship between the exogenous and endogenous variables of the system at a organizational level of analysis;
- the efficacy of the policies adopted by the management of the municipality could be widely reduced if they don't take into account the feedback loop structure underlying the organizational culture dynamics over time.

3. Methodology

The study was carried out in a municipality. The subjects of the study and the adopted procedures are described in the next paragraphs.

3.1 Subjects

To collect data about the dynamics of the organizational culture in the municipality we interviewed 12 top and middle management employees in accordance with the group model building (GMB) procedure. During the GMB sessions the top and middle management of the municipality have been involved for identifying the main cause-effect relationships (feedback loops) underling the considered phenomenon.

3.2 Designing the causal loop diagram (CLD) by group model building (GMB) sessions

Following Vennix et al. (1992), three main tasks were performed by modelers before the intervention: elicitation of information, exploring courses of action or convergent tasks, and evaluation. Once group members agreed about the procedures, the first phase started and adaptation of the model was performed. During this phase, interviews, cognitive maps, nominal group techniques, and workbooks were the main instruments used. During the convergent tasks phase, the subjects were called to choose between alternative problems elaboration, structural model and different policies. This phase was characterized by intensive of face-to-face discussion techniques. During the evaluation phase, the group discussed and agreed on the different issues. As a result of the intervention, not only choices were assumed, but also changes involving the mental

models were pursued. Vennix (1997) shows that GMB can be viewed as a method to facilitate a stimulating learning process. The main output of the GMB sessions was the CLD, a document that describes the causal relationship between the key-variables of the considered phenomenon in this study.

4. Results

Based on the CLD designed during the GBM sessions with the municipality management, a stock and flow structure was built. The following two figures (fig. 2 and 3) show the causal loop diagram of paternalistic and managerial cultures that play a relevant role in the considered organization.
As depicted in the Figure 2, the higher the intensity of the Paternalistic Culture, all other things being equal, the greater the number of workers' behavior aimed at protecting their leader and their own group from external attach. This workers' attitude produce a positive feeling of safety by membership and, as a consequence, the workers' consciousness about the convenience to feed this cultural model (reinforcing loop [R]). On the other hand, an increase of paternalistic culture determines a rise in the number of workers' behavior aimed to advantage their leader and their own group. This causes a worsen usage of organizational resources and, hence, determines a lowering of organizational efficacy and effectiveness. As a consequence, the service quality decreases and this mode of the resources usage became less sustainable from a organizational perspective (balancing loop [B]).

*Fig. 2. The causal loop diagram of the Paternalistic Culture*
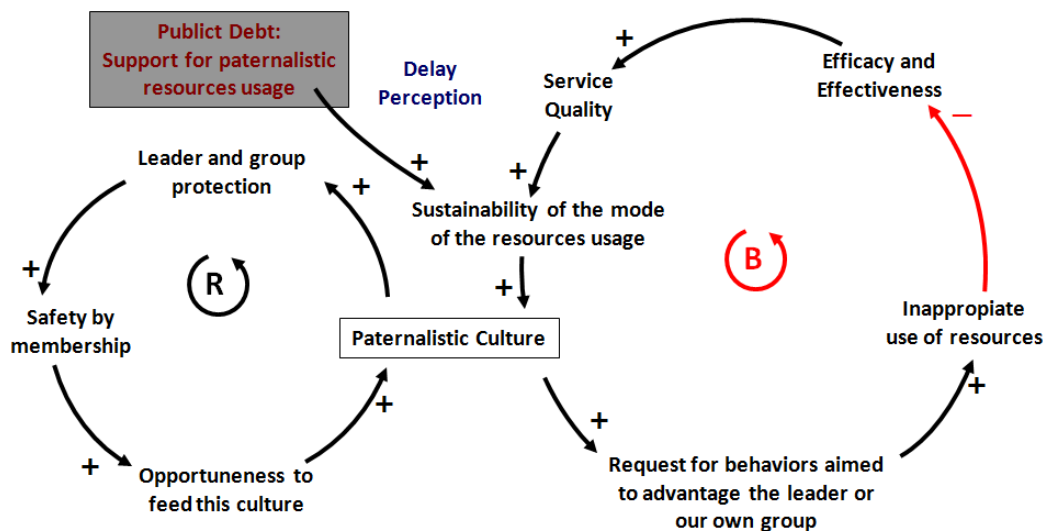
Indeed, the paternalistic subcultures that have been dominant in the past, now are being challenged as no longer able to sustain a balanced relationship between the organization and its environment, as a consequence of the changed social, economic and political conditions. The pressures that these new conditions exert on the organization and its management produce a widespread awareness about the inability of these cultural models to ensure the success for the organization. This seems largely due, from one

hand, to the new role of public finance, no more able to guarantee the sustainability of the typical public resources management of a paternalistic culture, from the other, to the changed relationship between the Municipality and its local environment, which cannot always guarantee to the public administration a condition of monopoly in the services delivery. The expectation is therefore that the buying behaviours of the citizens-customers will be increasingly influenced by the ability of the public organization to meet their needs with competitive cost. Consequently the paternalistic model, unable to be still guaranteed by the macroeconomic levers for the inefficiencies created by itself, will be gradually replaced by other cultural models (those that, in the past, were labelled as counterculture).

These ideas push us to analyze more carefully the dynamics of culture change that is shaping this organization. Indeed, it would seem that the change in organizational culture is a reflection of the reduced impact of the traditional macroeconomic levers on organizational working. If it is certain that the change in organizational culture is not determined solely by external factors to the organization, it must be recognized that their role is important. As Schein [3] has outlined: "The proposal to change the culture is likely be totally ignored by the dominant group in the organization, and that they oppose resistance. In contrast, it is likely that the dominant members or coalitions seeking to preserve and enhance the organizational culture of the past. The only force that could unlock such a situation is an external shock, for survival, in the form of a sharp decrease in the rate of growth".

The Managerial Culture began to spread across the organization in an attempt to offer themselves as the core of the new dominant culture. This trend of slow change of the specific weight of cultural typologies determines the phenomenon of the change in organizational culture.

Fig. 3. The causal loop diagram of the Managerial Culture
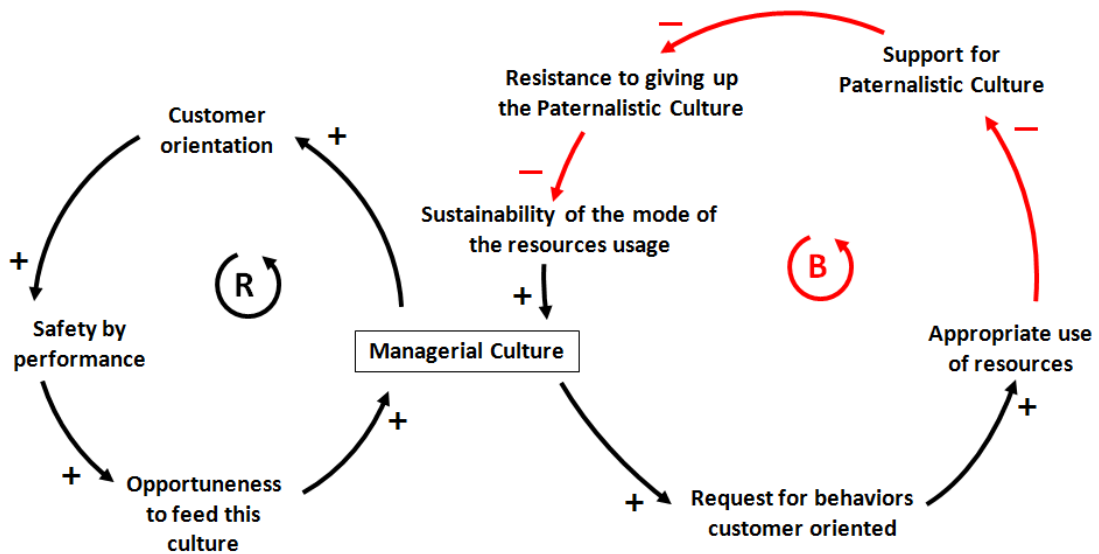

In fact, as the figure 3 shows, the higher the intensity of the Managerial Culture, all

other things being equal, the greater the number of workers' behavior aimed at customer services. This workers' attitude produce a positive feeling of safety by performance and, as a consequence, the workers' consciousness about the opportuneness to feed this new cultural model (loop R). On the other hand, an increase of managerial culture determines a rise in the number of workers' behavior aimed to increase the customer satisfaction. This causes an adequate usage of organizational resources and, hence, determines a lowering of the support for paternalistic culture. As a consequence, the resistance to giving up the paternalistic culture increases and this mode of the resources usage became less sustainable from a organizational perspective (loop B).

Figure 4 shows the causal relationships between the Paternalistic and Managerial Culture. This new causal loop diagram allows us to better figure out the balancing between the two different subcultures within the same organization. In fact, the more the Managerial Culture grows, the less the organizational system receive supports for Paternalistic Culture; as a consequence, the less the workers who decide not to abandon the Paternalistic Culture feel the organizational environment as not more safe as in the past, and this feeling produces anxiety, that is one of the main fuel for the workers' resistance to cultural change.

Fig. 4. The causal loop diagram depicting the causal relationships between Paternalistic and Managerial Culture
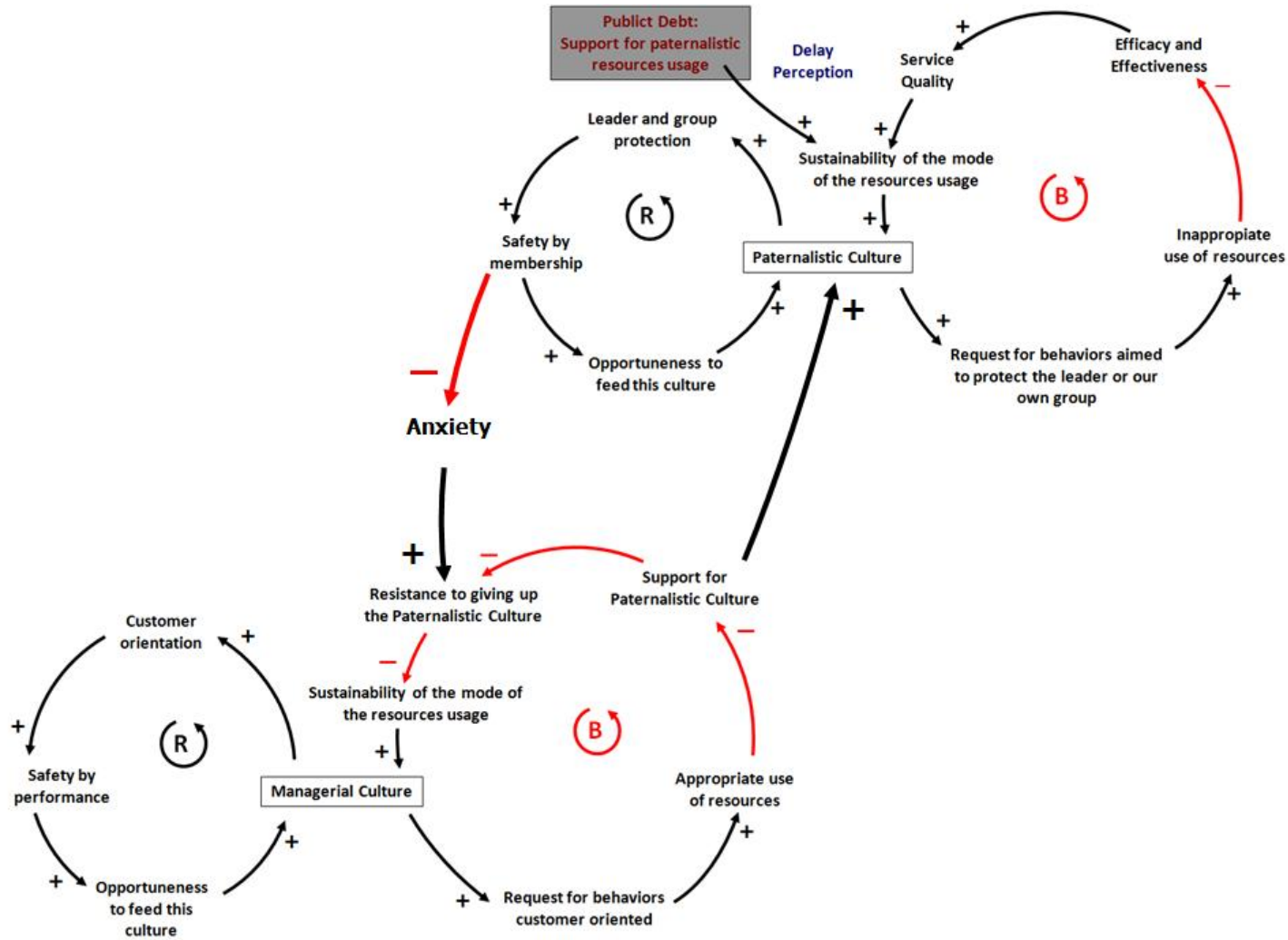
5. Scenario Analysis

The dynamics of the two considered organizational subcultures as a consequence of their relationships, as described in figure 4, are shown in figure 5 and 6. More in details, it is possible to design two different scenarios.

In the first one (fig. 5), the lowering of the paternalistic culture value determines an increasing of the workers' resistance to cultural change, and it is hypothesized that this resistance is able to contrast the growing of the new managerial culture within the organization. This is possible as a consequence of the double action of:

- a delayed perception of the changed macro-economic environment, that make the paternalistic culture no more able to guarantee the sustainability of the typical public resources management of a paternalistic culture;
- an incoherent national public policy that, sometimes, contradicts the policy of deficit-cutting to positively answer to an electoral requests from a particular interest group.

Figure 5. The relationship between paternalistic and managerial culture (Scenario 1)
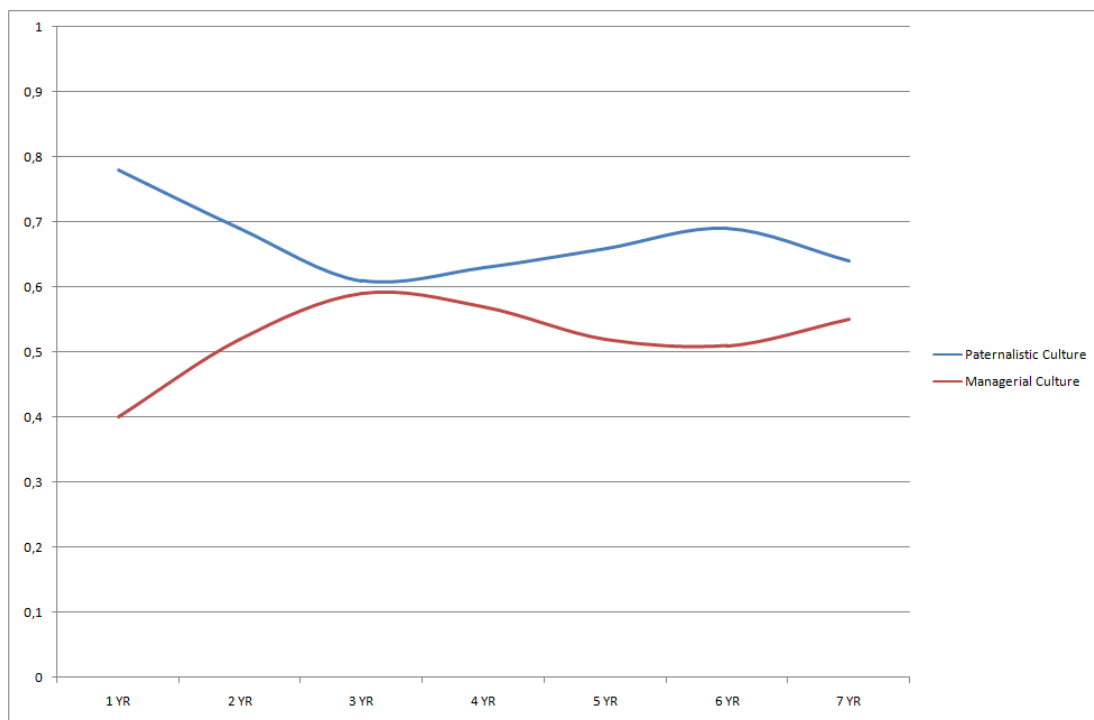
In the second one (fig. 6), the lowering of the paternalistic culture value determines a short-term increasing of the workers' resistance to cultural change, but it is hypothesized that this resistance is not able to contrast in the medium-term the growing of the new managerial culture within the organization.

Figure 6. The relationship between paternalistic and managerial culture (Scenario 2)
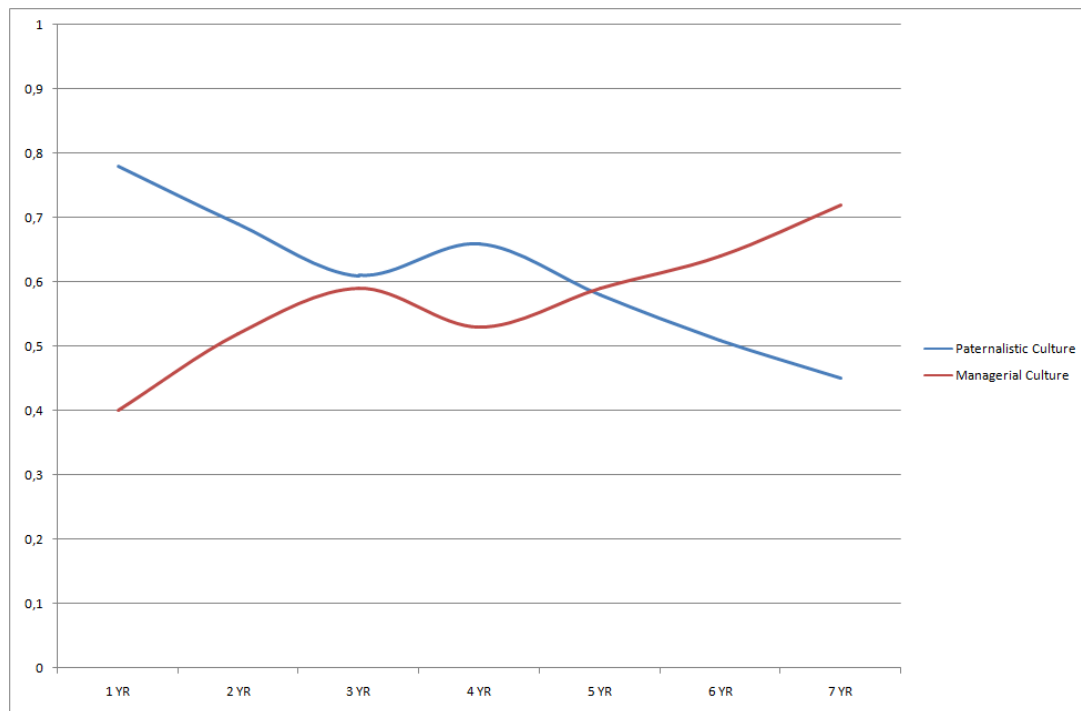
6. Conclusion and further research

One of the most interesting implications of these results refers to the possibility of formalizing a standardized protocol for the analysis of organizational culture that, starting from the considerations of Schein (1999) about the need to explore the culture through qualitative methodologies, split off from it later by verifying the presence of latent variables which are quite similar about their meaning. This could allow to observe the nonlinear dynamics of cultural change over time through a quantitative methodology, verifying if the data matrix produced by the theoretical model fits with the real data matrix. Besides, this research suggests a new methodological approach to explore the organizational culture dynamics and to suggest the adoption of specific policies to deliver an effective change management programme focused on organizational culture.

References

Schein, E. H. "Organizational culture", *American Psychologist*, 45, 1990, pp. 109–119.
Schein, E. H. "Organizational culture and leadership", 2° ed., San Francisco: Jossey-Bass, 1992.
Schein, E. H. "Three Cultures of Management: The Key to Organizational Learning". *Sloan Management Review*, 1, 1996, pp. 9-20.
Schein, E. H. "The Corporate Culture", John Wiley and Sons, 1999.

Cameron K. S. and Quinn, R. E. "Diagnosing and changing organizational culture", New York: Addison-Wesley, 1999.

Schneider, W. E. "The reengineering alternative: A plan for making your current culture work", New York: Irwin, 1994.

Enriquez, E. "I tipi di strutture decisionali, in AA.VV., Les problemes de gestion des enterprises, Dunod, Paris, 1970.

House, R. J., Hanges, P. J. Ruiz-Quintanilla S. A., Dorfman P.W., Javidan M., and Dickson M.W., "Cultural influences on leadership: Project GLOBE", In W. Mobley, J. Gessner, & V. Arnold (Eds.), Advances in global leadership (Vol. 1, pp. 171–233). Stamford, CT: JAI Press, 1999.

O'Toole J., "Vanguard management: Redesigning the corporate future". Garden City, NY: Doubleday, 1985.

Quinn R. E. and McGrath M. R., "The Transformation of organizational cultures: A competing values perspective". In P. J. Frost et al. (Eds.), Organizational culture. Newbury Park, CA: Sage, 1985.

Wallach E. J., "Individuals and organization: the cultural match", *Training and Developmental Journal*, February 1983, pp. 234-245.

Martin J. and Siehl C., "Organizational Culture and Counterculture: An Uneasy Symbiosis", *Organizational Dynamics*, 7, 1983, pp. 23-37.

Gregory K. L., "Native-view Paradigms: Multiple Cultures and Cultures Conflicts in Organizations", *Administrative Science Quarterly*, 28, 1983, pp. 359-376.

Sterman J. D., System dynamics modeling: tools for learning in a complex world. *California Management Review. 2001, 43(4): 8-25*.

Repenning N. P., Understanding fire fighting in new product development. *Journal of Product Innovation Management. 2001, 18(5): 285-300.*

Bendoly E., Croson R., Goncalves P., Schultz K., Bodies of knowledge for research in behavioral operations. *Journal of Operations Management. 2010, 19(4):434-452.*