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Title

Innovation and / or change – The historical evolution of two sociological concepts in Western Europe

Abstract

This article discusses the concept of change, and its heuristic relevance, as an alternative to the concept of innovation. From a sociological approach, the ideological character of innovation is refused and an alternative, more neutral, concept of change is adopted. It follows with the analysis of different sociological paradigms of change in organisations, focusing in articulating those with historical conditions and different theoretical proposals. Finally, the sociological discourses on organizational change will be reflected upon.

Keywords : change, learning, knowledge

Author

Cristina Parente¹

1. Ideological Discourses on Innovation

The concept of innovation became popular, and acquired some visibility due to the technical and economic changes faced by western countries in the 1980's. It started to be commonly used in economic policies of development, particularly in the more instrumental dimension of both industrial and technological policies. It focused on the production of knowledge in Economics and it took an essentially technological dimension. Scientifically, innovation succeeds both historically and theoretically to the concept of change, which was developed by and widely used in the classical Sociology of Work, Organisation and Industry.

It is relevant to note that the most privileged dimension of studies on innovation, mainly sociological studies, has been the one of technological innovationⁱ. On the other hand, the approach to other dimensions, in particular organisationalⁱⁱ and socioculturalⁱⁱⁱ, has been relatively recent. This idea is

¹ Senior Lecturer in Faculdade de Letras da Universidade do Porto, Sociology Department/ Sociology Institut. E-mail: cparente@letras.up.pt

also mentioned in the *Green Paper on Innovation*, stating that one of the main handicaps of European innovation systems is situated at the level of organisational innovation, 'which does not allow inefficient business models to modernise'; models which are still present in a lot of companies (European Commission, 1995, p. 16-17). Thus, social conditions, mainly economic, have prevailed, orientating and shaping scientific interests.

Schumpeter (1991[1947]), back in 1934, questioned the concept of innovation beyond its economic perspective, and focused in both its social and organisational dimensions. Within neoclassical economic theory, innovation was mainly considered as a technical change, as an external variable of Economics. Innovation was understood then as process-innovation, a change towards perfecting technical equipment. Only after Schumpeter's proposal, which represented at the time an exception to the dominant paradigm, was product innovation known to Economics.

Schumpeter's (1991[1947]) definition of innovation provides a broader sense to the concept, overcoming the simple concept of technological innovation. To this author, innovation meant to reform or revolutionize production routines, making use of an invention, or more broadly, of an original possibility. For Kanter (1988) that definition allows to think of innovation as the process of bringing up and into action any form of problem solving. These new forms of problem solving are not confined to the technological field, the direct application of scientific and/or empirical knowledge, or to the production of better processes and products. Innovation can be understood as a different way of doing things at organisational and socio-cultural levels. This way, in the analysis of economic processes, innovation will have to be thought as an endogenous variable.

Thus, and although this paper does not defend a total homology between the concepts of change and innovation, it was decided, from a sociological point of view, to use the concept of change throughout. There are various reasons that justify this option: (i) the concept of change is less ambiguous, and, in line with the necessity of space-time context, more neutral. On one hand, the concept of innovation is linked to a very specific historical context: the economic situation of First World countries in the last

quarter of the 20th century. On the other hand, innovations exist in every time and space frames, and maintain their originality until the moment when they are socially implemented and end up losing its innovative character. However, this implementation does not happen everywhere, it assumes different rhythms and objectives in each society – the meaning of innovation may vary within each society at a specific given time. Thus, using the concept of change instead of innovation allows the analysis of transformations within a particular space-time context; (ii) innovation implies novelty and originality, which can either be radical or incremental, determinant from the point of view of market mechanisms, but less so from an organisational and sociocultural positions. In this sense, all innovations can be considered as change; however the same does not happen the other way around – the return to previous conditions is itself a change, but it cannot be considered as innovation since it is not original; (iii) the concept of innovation is inbuilt in the Western world's recent past, that is to say that it carries within itself the capacity to anticipate and influence those needs. This line of thought is equally valid for the concept of change since it can also have a proactive role. However, this role may not be original, or one could be looking at a situation of reaction instead. Nevertheless, in both situations one can face changes which have been originated in the past but which are still active both in social and organisational terms – and is this line that will be interesting to analyse in sociological terms; (iv) the organisational scope of the concept of innovation is an area where the options taken in terms of models and strategies for change, frequently take up both a technocentric and economicist approaches, with the objective of identifying the positive social impacts that are inherent to the concept of innovation^{iv}.

Given its heuristic potential the concept of change became the obvious choice. The concept of change is understood to be both a process and a mean to achieve specific organisational accomplishments which imply solving problems by using different technical, economical, organisational and socio cultural options. This way, the institution is considered as an organisational complex encompassing work, technical and material resources, systems of relationships between individuals and groups, and composed by strategic, tactical, administrative and operational decisions. Kotler's proposal for defining innovation could then be followed to define change as any good, service or idea that is

understood as being new. An idea can have a long history, but it is an innovation to those who see it for the first time (1967), similar to the company that did not know of it and/or did not implement it. We have, however, adopted the concept of change which has more neutrality and less ideological power.

2. Sociological Paradigms on Change in Organisations

Change is evident in the present world economics' scenery, making it one of the most discussed issues by politicians and technicians, company employers and employees, academics and scientists. Immediately after World War II, change was seen as a discontinuous phenomenon related to isolated projects. Today, change is continuous and living in a context that is characterized by the constant flow of movements and changeability (Stacey, 2007). Its width, and growing speed create new dynamics in the business world, characterised by instability, unpredictability and uncertainty.

In Sociology, two paradigms have gained strength: from an approach to change as moment of crisis and chaos, to a new analytical paradigm on which its theoretical and ideological proposals are based on a more positive and optimist perspective of change (Duboisson; Kabla, 1996). We shall analyse in the first instance its paradigmatic evolution, to then concentrate our attention on the present context of organisational changes.

The first sociological studies on change approach this issue from a technological perspective only. Between the 1950s and the 1960s the French Sociology of Work focused in the relationship between technological advances and the evolution of work. Change was seen as a state of disturbance and disorder revealing other sort of sociologically interesting phenomena, like the consequences of work developments on technical transformations. Strikes and other social conflicts were also studied (Mallet, 1963; Friedman, 1950).

Although influenced by a Marxist line of thought, writings of the time associated change to crisis. Crisis, on the other hand, was understood as movements of conflict, which assured the passage from

one moment of stability to the next. Thus, this approach was partially influenced by a consensus paradigm characteristic of American functionalism.

Nowadays, these issues are reversed. Change acquires a positive status when it comes to stability. Innovation, seen as a process of change, allows to understanding how different organisational stages change, how new organisational stages emerge, and how these stages get stable after the creation of new rules and procedures. Change is not studied as a phenomenon in itself, instead, the focus is on the effects and the interactive processes which surround it.

Since 1970, studies on the relationship between information and communication technologies (ICT), and work, namely, professional qualifications, work conditions, and work organisations have proliferated. The analysis of such issues takes a more intensive approach in the 1980s and 1990s. Sociologists do not study innovation in itself but the consequences of its application and diffusion within different work scenarios, i.e. when incorporated in various pieces of equipment or in technical procedures.

The issue of resistance to change has also been filling an important role in sociological studies, by reflecting the increasingly worry with the non-regulated introduction of ICT, as well as the need to articulate those techniques with organisational and social change. It seems, however, that at the moment the sociological discourse on change is outdated. On one hand, change stays attached to an isolated and periodical conception. Particularly in big organisations, where different stages of change coexist, it cannot be seen as an isolated phenomenon but as a continuous and permanent one instead. Organisational reality is described as the stage for consecutive changes that never finish, and which are present in their different forms every day – making it impossible to isolate causes and consequences, since these are entwined and influence each other.

On the other hand, the sociological discourse has given enough attention to technological change. It has been shown that technological change is frequently slower – because it demands great investment

– than sociological production can anticipate, resulting from the attention devoted to its impacts in the reduction of work places and increase in productivity. This frame of mind has produced exaggerated interpretations, which point to processes of technological change as cause for unemployment. However, these changes are not technologically determined; they are dependent on Human Resources' (HR) decisions at the training and mobility levels, which can be compatible with strategies of sectorial transference of paid workers.

Organisational changes have in turn less visibility as they do not involve many financial and human costs, and also because these practises are very recent. However the present set demands questioning the know-how and the ways of organisation. Trying to find new organisational solutions is an everyday practice of big organisations, although its consequences are neither direct nor clear. Not enough attention has been devoted to its effects since those changes tend to happen exclusively inside organisations, whilst technological change slides to external settings through unions and the media.

Currently, in big organisations, organisational changes are present on a daily basis, even in areas which have been stable for a long time, that is the case for instance of productive layout. These changes are continuous, and look for an organisational configuration better adjusted to both internal and external environments. Its flexibility and limited use of resources allow permanent readjustments to the introduction of new changes, with constant advances and drawbacks. The resulting instability creates anxiety and unhappiness for some, and works as a mechanism of motivation and source of learning for others.

Recent sociological analyses tend not to separate both contents and context from change. They describe the phenomena, its processes, and mechanisms in place to explain how a rule, a practice or a technique emerge, how it is established, and how it materializes in practice, taking into account the dimensions of institutionalisation and interaction (Dubuisson; Kabla, 1996).

Other studies propose an approach that aims to overcome the simple analysis of impacts of change to focus in the way these processes are lived instead, crossing different factors of technical, economic and sociocultural nature in the processes of change.

3. Sociological Discourse on Organisational Change

We believe that technological change has taken a dominant role from the 1970s with the broad use of ICT. Despite of being discussed by academics and social scientists since the 1920s, sociological discourse on organisational change has taken a new direction in the 1970s. Organisational change became a practical question aiming at improving competitiveness.

From the moment Sociology became interested in the problematic of the industrial world, in the beginning of the 20th century, it showed, based in the teachings of the school of Human Relations, a humanist approach to processes of organisational change. Different parts in an organisation have different interests, however, it is possible to make them compatible through workers' participation, improving at the same time both the working conditions and the production efficiency. The owners' powers should be counterweighted by other power sources as the main condition for existing industrial democracy (Desmarez, 1986, p.22-23). For Todd (1933), a rise in productivity would result in the workers' integration in companies, their involvement and their satisfaction. For this to happen, employers ought to have a social education that would enable them to understand their employees' behaviours and motivations. Proposals from a scientific organisation would be challenged by democratic models, whose ideology promoted equality in work relations.

With regards to the organisation of work and conceptualisation of companies, we defend the restriction of employers' powers and the recognition of citizenship rights to all workers. The aim here is to attempt to moderate the dependency of the latter from an excessive hierarchic and authoritarian structure, legacy of a scientific management of productive activity within bureaucratic organisations. In a broader societal level, it aims to improve the influence of unions as well as the institutional mechanisms for workers' representation. These perspectives therefore, tend to promote the

humanization of work, and democratization of organisations by enhancing different forms of indirect participation.

This problematic arrives much later to Europe, highlighted by a Sociology of Work which has always been more academic, less interventionist and less related with the practices of management. Relevant contributions have come from the Tavistock Institute of Human Relations, which proposed an alternative to the American model of scientific organisation of work. The Institute's main aim was to show the organisation's mechanistic model was inadequate to unstable environments and, therefore, proposed a more flexible organic model, consequently facilitating the capacity of organisations to face expected problems and other unforeseen situations (Burns; Stalker, 1961). Based in the analysis of social and technical relations and by highlighting different forms of work organisation, the Institute proposed not only socio-political but also organisational alternatives to show how a flexible approach to the social system could adapt itself to technical situations. The organisation is conceived as an open system influenced by external factors. It is self-regulated through an optimal articulation of both technical and social systems with the surrounding environment. Based in new forms of organisation of work, both the Tavistock Institute and the Socio-Technical School propose the enrichment of work contents, and the improvement in the nature of communication and social relationships among people (i.e. cooperative and self-management initiatives). However, these new forms of work organisation only gain relevance in the 1970s, in particular in Scandinavian countries.

The control for management and property constitute the two basic dimensions around the discussions on democratization of work, and the workers' participation. The relation decision/property has in itself contradictions mainly due to diverging interests from workers and employers; in that the more control workers have in the organisation, the bigger the opportunities are to change decision-making processes. Thus, these two components allow the establishment of an organisational typology based in the workers' participation (Table 1): (i) traditional organisations are characterised by the non-participation of workers in the management of those organisations; (ii) collective organisations represent those workers which, despite controlling property (although this property belongs in fact to

the state), do not participate in the management of the organisation; (iii) modern capitalist organisations that retain control mainly through initiatives like autonomous and semi-autonomous groups. This control is achieved by widening and enriching both the tasks and quality circles. However, the workers' capital ownership is low or inexistent; (iv) cooperatives where both the management control and property belong to workers (Tezanos, 1987, p.26-27).

These four types of companies can be seen as progressive forms of organisational change, unveiling an increase in the intervention capacity of workers in management decisions, particularly visible in cooperative organisations, where controlling the property is a condition for an effective participation in the decision-making process.

Participation from workers will only be advantageous for them if it is part of a process of cooperation where workers can take decisions at strategic global level. However, when this participation reaches control levels outside those established by senior management, the latter will cease opportunities for workers' participation. This process of democratisation of work finds obstacles not only from senior management but also from its own workers. Influenced by routines that are both individual and subordinate, workers question these new democratic forms, refusing sometimes to participate. Corporative criteria are, among other factors, the reason why such refusal happens – maybe because the workers' contributions are appropriated by and in favour of institutional powers, or because workers are not motivated nor convinced of their own capacities, or even because they are simply not interested in such way of participation. The range of participation by different workers is one of the classification criteria, which allows differentiating direct participation from indirect one (Table 1).

Forms of indirect participation are integrated in some democratic structures, like negotiation and collective participation. These forms conceptualise organisation as a whole, aim at stimulating collective results, and are decision-making oriented, especially those of strategic relevance. Direct participation, in turn, is expressed by direct intervention of workers in the decisions that affect their work activities. Here, we discuss a logic aimed at individual workers, with the objective of stimulating

individual contributions. It mainly aims at everyday work activities, viewing organisations as a whole, where interests and objectives stand side by side (Hyman; Mason, 1995).

Castro (1982, p.74-75) proposes two forms of participation at work, based on the obligations required by the right to decision-making: the cooperation and co-determination (Table 1). In the former, workers influence the decisions taken by organisations, receive information and make suggestions, but they are not responsible for those decisions, even though they can reject these decisions. At the co-determination level, workers control the decisions and are responsible for them. Thus, workers have the right of decision-making and co-decision.

In summary, it is possible to associate indirect participation to cooperation, and direct participation to co-determination. Both indirect participation and cooperation are orientated to management decisions and are the basis of industrial democracy which assumes the shape of a political structure where decision-taking is shared by a formal representation of workers, at all levels of work. Direct participation and co-determination, on the other hand, aim at ensuring the organisations' daily routine, and are the basis of participative management, where workers are seen as actors with decision power in their everyday work tasks. These features constitute part of recent sociological proposals for organisational change.

Table 1 summarises the above discussion by crossing different criteria, which typify the practices of organisational change, by company type.

Table 1 - Characteristics of organizational change by type of organization

Organizational practices Type of organization	Domains of Participation		Modes of Participation		Power of Participation		Characteristics of organizational change
	Management control	Property	Direct	Indirect	Co-determination	Cooperation	
Traditional organizations	-	-	-	-	-	-	Absent
Collective organizations	-	(+)	-	+	+	-	Industrial democracy (symbolic)
Modern capitalist organizations	+	-	+	-	-	+	Participatory management
Cooperative organizations	+	+	+	+	+	+	Industrial democracy and participatory management

+ Actual existence of characteristic

(+) Symbolic existence of characteristic

- Non-existence of characteristic

Until 1970, both perspectives of indirect participation and cooperation were the basis of proposals and practices of organisational change in Sociology. Industrial democracy's main aim was to overcome, in one hand, the contradictions between political participation and company's authority and, on the other hand, to overcome the weak representative participation. In this context, as it was discussed, the traditional concept of change loses its importance in the management discourse, and is replaced by the notion of organisational innovation.

Nowadays, the notion of organisational innovation is broader and encompasses a vast array of organisational and managerial methods, and techniques like *just in time* (JIT), subcontracting, reduction of permanent staff, reengineering or total quality, all of which aim at contributing to solve

management. The improvement of the organisations' performance is then evaluated in terms of implementing different types of innovations, able to deal with adverse conditions in an ever changing environment.

The participation of workers is now pictured within an ideology of competitiveness associated to the technocentric management of technological change. The focus is on technological innovation, in quality and *toyotism* proposed as an universally applicable model (*lean production*) able to maintain and/or improve competitiveness, and making use of motivation, know-how, creativity and intelligence of human resources on its behalf. Workers' participation becomes related to deep social and cultural changes that started to occur in the 1980s and 1990s characterized by a personalized, and mobile society. Achieving individual autonomy becomes the main objective, bringing in 'new' conceptions of company and work which tend to be seen as spaces of cultural and social production, where individuals and groups can express their subjectivity, feeling of belonging, and finding their identity, not like ordinary spaces of production of goods and services. The worker tends to be increasingly considered as an active social being, able to control his/her performances through interiorising the organisational culture, and less as a production tool. One is looking at an increasing process of individualisation of work relations where the importance attributed to individual qualifications and competences is associated to an instrumental perception of their development, recognition and value as a strategy to improve competitiveness in organisations. As a space where both individual and collective projects coexist, the organisation and its managerial staff acquire legitimacy. This approach involves a concept of company-institution, which is coherent with both a theoretical perspective and an interventionist reflection.

We believe we have clarified the different conceptions and proposals which inform sociological discourses on organisational change. These discourses translate different ways to understand the concept of change – on one hand, the concept associated to the democratisation of work and new forms of work organisation, characteristic of a humanist perspective of the 60s and 70s; on the other hand, a proposal for participative management and work enrichment with functional objectives as an

answer to the new patterns of competition, present mainly in the 1980s and 1990s, and which focuses on two main issues: i) Contemporary discourse around organisational change, in particular the one associated to the ideology of competition and technocentric change management, is framed in a broader context of valorisation of HR. It encompasses an ideology that sees people as resources, able to create value, not necessarily for their own benefit. The ambiguity of this discourse is evident through the different forms of implementation of practices of organisational change. Despite the absence of unique models, the discourse on organisational change has a positive perspective, favourable to workers, in that it proposes replacing the old paradigm of control for commitment, which does not always correspond to effective practices in companies; ii) Despite this evolution in management discourses, the practices reveal contradicting trends. Practices of direct participation and co-determination are more common within the operational working group, whilst both the indirect participation and cooperation are more common practices within managerial staff, regardless of owning the capital or not. Ambiguities increase when different forms of direct participation tend to exclude representative or indirect participation and are used only as means of legitimating administration prerogatives.

It is not that frequent to see significant changes both at organisational level and content of work activity, where hierarchies remain unchanged. Castro (1982) suggests that workers should retain decision-making capacities, in order to obtain some power within the organisation. In fact, organisations can only achieve better results with participative experiences, if they are capable of learning how to use the workers' abilities in the management of the organisation.

Questioning the technical and economical rationality, intrinsic to classical models of organisation and management, has led to a paradigm change, where both participation and democratization gain a new sense, even though their objectives are clearly instrumental. Zarifian (1996), discussing the principles of efficiency and classical forms of rationality, presents an alternative paradigm of cooperation where organisational and management practices are ruled by the need of coordination, communication and cooperation. These practices are characteristic of an anthropocentric model of management of change.

However, there are authors who believe these models to be expensive from a social and taxing point of view. As well as not having a bright future ahead due to modern economic trends, these models are challenged by globalization, and by the need for profiting from short-term investments, leaving human working relations to a secondary role.

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Biography

Cristina Parente is Senior Lecturer in Sociology at the Faculdade de Letras da Universidade do Porto (FLUP) since 1990. She completed her degree (1989 – 1990) and PhD (2003) in the Department of Sociology of the same university and her MPhil (1996) at the Instituto Superior de Ciências do Trabalho e da Empresa (ISCTE). Her research interests focus in the areas of management of human resources and adult training, sociology of work and social economy. She created and coordinates the Continuous Education and Training Section in the Sociology Department. She also participates in training and consultancy activities in the areas of research methodologies, evaluation and social intervention.

ⁱⁱ Innovation's technological dimension refers to changes in both the process and the product. They both assume the existence of economically friendly infrastructures of production of scientific and/or empirical knowledge. The two main disciplines where innovation plays a pivotal role in are: different branches of Engineering Science and related areas of creation and design responsible for the process of invention, i.e. conception of ideas, models for a new product, process or system; and Economy and Management, which ensure the transition from invention to innovation, as these areas are dedicated to the analysis of the best conditions of commercialisation of the concept. Therefore, not every invention becomes innovation as the latter depends not only on the conception and creation of an idea or concept but mainly on the possibility of commercial exploitation; only by its commercialisation it is possible to transform invention in to wealth.

ⁱⁱ Innovation's organisational dimension focuses on the changes in the working conditions and its methods, the ways individuals understand and relate to each other and with other social groups with different interests from those of their own, as well as concentrating on changes in the configuration of functional, processual and decision-making mechanisms.

Management, Sociology and Psychology become the fundamental disciplines treating these type of innovations in the way that these changes affect both the managerial and organisational structures.

ⁱⁱⁱ The social and cultural dimensions of innovation focus on changes of values in peoples' attitudes and behaviours.