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Intervention Research in Organizations: Some Reflections upon an Empirical Case

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Abstract

In this paper, we will describe and discuss an intervention research currently carried out in an Italian medium sized athenaeum. In addition, we will try to identify the appropriate path to assess it. The intervention research at hand aims at changing the existing ways of organizing the administrative work process of the athenaeum, in order to increase the effectiveness and efficiency of the administrative action which supports the implementation of the political decisions made by the athenaeum's academic bodies. We will first draw on the existing organizational literature in order to identify the main features which distinctively characterize intervention research, and differentiate it from other forms of research in organizations. After having described the implications of the recourse to the epistemological choice, and ontological standpoint put forward by Weber for intervention research in organizations, we will describe the empirical case of intervention research at hand. We will highlight the main points that mean it can be regarded as an intervention research prevalingly directed by the epistemological choice put forward by Weber, and the related ontological standpoint according to which the organized work situation is seen as a form of social Handeln. Finally, we will address the issue concerning the most appropriate criterion which should be used to assess intervention research prevalingly directed by Weber's epistemological choice and ontological standpoint.

Keywords: intervention research in organizations, adequate causation, objective possibility, social Handeln, participation, ideal type

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1 INTERVENTION RESEARCH IN ORGANIZATIONS

The concept of intervention research or action research was first introduced by Kurt Lewin in an article entitled “Action research and minority problems” published in the *Journal of Social Issues* in 1946.

As Lewin highlights, action research is a “comparative research on the conditions and effects of various forms of social action, and research leading to social action”. Its course is very similar to the problem-solving process: “It proceeds in a spiral of steps, each of which is composed of a circle of planning, action and fact finding about the results of the action”. In other words, in the eyes of Lewin, action research is a way of doing research primarily turned towards practice, and the solutions of real social problems (among them, the attention of Lewin is primarily focused on those which concern interpersonal and intergroup relationships). Furthermore, Lewin points out that: “The research needed for social practice can be best characterized as research for social management, or social engineering”, namely as research able to affect and change social practice. According to Lewin, knowledge produced by basic and academic research, concerning the general laws of group life, and dealing with the relations between possible conditions and possible results, which are expressed in “if so” propositions, is not the only one needed to change social practice. Also knowledge about the specific character of the situation at hand, which can be obtained by a scientific fact finding called diagnosis, is needed. Both sorts of knowledge are needed for practice and for action research.

As it has been pointed out (Bargal, 2006), because of his sudden death, Lewin never systematically formulated the principles of action research. However, he develops a proposal which highlights some main features which distinctively characterize intervention research, and differentiate it from other sorts of research, namely: the simultaneous pursuit of aims of knowledge and change, and the attempt to bring together theory and practice, action and reflection, in the pursuit of practical solutions to real problems.

On the basis of these formulations, intervention research has been defined as a cognitive activity of analysis and reflection upon a practical and real problem which is carried out in practice, and precedes a certain intervention upon reality (Gilli, 1971).

As Albano points out (forthcoming), in the field of organization studies, the concept of “intervention research” is used to refer to research in which the link between analysis and reflection upon the organization, on the one hand, and organizational design (i.e. conception) and change, on the other, is regarded as indissoluble.

Furthermore, Bonzanini and De Masi (1984) highlight that intervention research differs from “cognitive” research since within the former the change of the existing ways of organizing the work situation is the outcome intentionally pursued by means of the intervention research, while within the latter it is a consequence that researchers try to minimize, rather than the primary aim of the research. In other words, within intervention research, the “cognitive activity of analysis and reflection upon” the existing ways of organizing the work situation is intentionally carried out with the aim of changing them. Therefore, organizational change is intentional, namely it belongs to the set of consequences which people taking part in the intervention research wish to reach, and take into account.

In addition, within intervention research, organizational change is not only intentional, but also intended: it is oriented to the attainment of a desired outcome. For instance, Maggi (1990) identifies: the increase of the power, and the margins of manoeuvre for those acting in the work

situation with respect to the restrictions coming from the organized work situation; the maximization of the effectiveness and efficiency of the work situation; the satisfaction of its needs concerning inner integration and outer adaptation; the improvement of the degree of the attainment of the work process desired outcomes, such as quality, effectiveness, efficiency, health and safety of people working in the work situation. This feature, first pointed out by Maggi (2003)¹, highlights that intervention research is based on the assumption that the change, and the intervention upon the existing ways of organizing the work situation can be conceived and designed according to a means-ends causal scheme.

Finally, Grandori (1996) highlights some additional features which distinctively characterize intervention research and differentiate it from other forms of research in organizations, namely: strong link (integration) between organizational theory and practice; participative approach, according to the idea that the active cooperation in all the research phases of all the subjects working in the organized work situation/process, rather than the attempt of minimizing their influence on the design of the intervention research, is needed in order to produce knowledge really able to affect organizational practice; participation extended to all levels and intervention oriented to affect the overall design and the ways of ruling and governing organizational processes.

We believe that the elements that distinctively characterize intervention research and differentiate it from other forms of research in organizations (i.e. intentional and intended organizational change as the intervention research desired outcome; strong link between organizational theory and organizational practice; participative approach) are tightly linked. More specifically, we believe that the desired outcome of the intervention research (i.e. intentional and intended organizational change) accounts for the other features which characterize intervention research in organizations (strong link between organizational theory and practice, and participative approach), since these can be viewed as instrumental means with respect to the pursuit of such desired outcome.

With regard to the need for the strong link (integration) between organizational theory and practice, this seems to be explained by the aim of coming to a change which, in turn, is oriented to the attainment of a desired outcome, and by the consequent need for designing (i.e. conceiving) the change of (and the intervention upon) the existing ways of organizing the work situation in accordance with a means-ends causal scheme. In other words, within intervention research, theoretical knowledge of organization is used not only to analyse and/or reflect upon the existing ways of organizing the work situation which should be changed, but also to obtain criteria to identify different ways of organizing the work situation consistent to the attainment of the desired outcome which is pursued by means of the organizational change. If obtaining criteria to conceive the organizational change in accordance with a means-ends causal scheme isn't one of the reasons to draw on theoretical knowledge of organization, the research should be regarded as "cognitive research" within which organizational change is an unintentional consequence that researchers try to minimize, rather than the intentionally pursued aim. Furthermore, if theories did not provide criteria to design the organizational change in accordance with a means-ends causal scheme, the research would hardly come to the identification of change solutions. In the light of that, a point which seems to be worthy of being underlined is that which concerns the capability of theories to provide criteria to identify different ways of organizing the work situation consistent to the attainment of the desired outcome pursued by means of the change. In this regard, we believe that theories should express pieces of knowledge dealing with cause-effect (or mean-end) relations, namely knowledge which can be used to explain (or to anticipate) the consequences (or effects, or

¹ « Le besoin de comprendre le changement organisationnel ne devrait-il pas aussi impliquer le besoin de comprendre l'intentionnalité du changement, c'est-à-dire de s'interroger sur la capacité que les sujets peuvent avoir de concevoir et de changer l'organisation de manière instrumentale par rapport aux résultats qu'ils désirent atteindre? » (p. 84) ("The need to understand organizational change would also imply the need to understand the intentionality of the change, namely the need to reflect upon the capability which subjects may have to conceive and change the organization in a way which is instrumental with respect to the outcomes they wish to reach"- our translation).

ends) associated with certain conditions (or causes, or means), in order to be able to provide criteria to identify different ways of organizing the work situation consistent to the attainment of the desired outcome pursued by means of the organizational change.

In a similar way, the need for a participative approach can also be regarded as the means to attain the desired outcome pursued by means of the intervention research. In this regard, Grandori (1996) states it explicitly: the active cooperation in all the research phases of all the subjects working in the organized work situation studied, rather than the attempt of minimizing their influence on the intervention research design, is required in order to produce knowledge really able to affect (and change) organizational practice. Similarly, Maggi ([1996], 1997) highlights that personnel's participation in the intervention research is needed because without their contribution of specific knowledge of the organized work situation studied, the work situation can be neither completely known, nor conceived (i.e. created). Another voice in support of the need for personnel's participation in the intervention research in organizations is that of Fabbri (2003). He points out that knowledge needed to change the organizational decisions concerning each work situation/process is, at least in part, not symbolic, but practical, generated by the process (conceived as a form of social *Handeln*) and not really detachable from it. Thus knowledge is embedded in the work process and not able to be transferred to other people or processes in a nutshell. As the author points out, the consequence is that the possibility for an external analyst to "know" the work process/situation, and its actions and to affect its organization is seriously limited. Accordingly, Maggi ([1996], 1997) has highlighted that, on the basis of this viewpoint, personnel's participation in the intervention research is interpreted and implemented as *the analysis, reflection and intervention upon the (organizational decisions concerning the) work situation carried out by people working in that situation, and by relying upon their specific knowledge of such situation*, or, putting it in other words (Albano, forthcoming), as *intervention research led and carried out by people working in the work situation studied, and decisions about the intervention research design (i.e. about the intervention research aims and the ways to carry out it) made by such people*².

2 THE "RELATIONAL" APPROACH TO INTERVENTION RESEARCH IN ORGANIZATIONS

2.1 Premise

2.1.1 The epistemological choice: Weber's conditional explicative scheme

According to Weber (1904), social sciences are "sciences of reality"; their basic aim is to *explain individual* social phenomena (i.e. the events of the human world in their distinctiveness). In other words, they are interested in knowing (explaining) what makes each social phenomenon different (i.e. its "qualitatively characteristic particularity and singularity"), not what in empirical social phenomena is "consistent with the genre" (i.e. a set of characteristics which are common to several phenomena).

For this reason, the explanation of an individual social phenomenon is based on different categories than those of necessary and probable causation (Weber, 1904). More specifically, Weber (1906)

² It is worthy underlining that Maggi ([1996], 1997) have highlighted that, on the contrary, and according to different viewpoints, personnel's participation is interpreted and implemented as *active collaboration, and inflow (addition) of their knowledge, judgements and experience into (to) the analysis, and/or reflection, and intervention upon the (organizational decisions concerning the) work situation carried out by a third subject*, not necessarily external to the company (namely in terms of *informative and advisory support to the analysis and/or reflection and intervention upon the (organizational decisions concerning the) work situation carried out by a third subject*), or, putting it in other words (Albano, forthcoming), as *taking part in the intervention procedure within an intervention research which is led and carried out by an external subject (who generally is a professional researcher) who makes decisions about the research aims and the ways to carry out it*.

puts forward categories such as those of “adequate causation” and “objective possibility”³. Therefore, according to Weber, explanation lies in the ascertainment of the *adequacy* of the conditions for the *objective possibility* of an event.

As Weber (1906) points out, the basic operation needed to do that is that which lies in framing a hypothetical process with which the actual process (i.e. the course of the event which occurred in a certain way and not otherwise) has to be compared. The hypothetical process can be obtained by means of a conceptual process which implies a series of abstractions. The first and crucial abstraction is accomplished by imagining one or several objective causal components of the actual course of the event as absent or altered in a certain direction. Therefore, the operation needed to make a causal attribution (i.e. to ascertain the adequacy of the conditions for the objective possibility of an event, and to make a judgement of objective possibility) *does not* lie in the mere observation of the actual process, but in framing imaginary schemes, obtained by neglecting one or several elements of the reality which actually exist, thus in conceptually framing a process which has been changed with respect to one or several conditions. And, as Weber (1906) points out, this operation involves taking the attention off the empirically given reality.

The second step towards the formulation of a judgement of objective possibility lies in asking oneself whether the same consequence (with respect to the “essential” points, namely the aspects of the course of the event in which we are interested), or which other one, could have been expected given the changes imagined with respect to the conditions of the event, and according to general and causal rules of experience⁴. In other words, the second step lies in the formulation of causal claims, based on general rules of experience, about what would have possibly (not necessarily) happened if certain conditions of the event had been absent or altered (Weber, 1906).

In this regard, the author highlights that the formulation of a judgement of objective possibility involves making reference to general rules of experience, and employing nomological knowledge concerning these rules (Weber, 1906) (i.e. knowledge about the regularities concerning adequate causal connections), since this is necessary in order to make a *valid* causal attribution of whatever individual consequence (Weber, 1904). However, according to Weber (1904), general rules of experience- to which nomological knowledge refers- are adequate causal connections expressed in rules, thus an application of the category of objective possibility, not laws dealing with necessary or probable cause-effect relations between classes of social phenomena expressed in “if then” propositions. More specifically, they are conceptual/ theoretical constructions within which causal connections deemed to be adequate are framed, by relying upon the category of objective possibility. They highlight the elements (i.e. conditions) which are associated in a causally adequate way with the consequence to be expected.

Thus, drawing upon general and causal rules of experience makes it possible to judge the causal significance of the (those) element(s) which are the objects of control. More specifically, it makes it possible to distinguish causally accidental conditions from conditions which are causally adequate with respect to the occurrence of the event. In this regard, Weber (1906) highlights that a condition must be regarded as a causally accidental condition (i.e. a condition without causal significance) where, according to general rules of experience, the same course of the event (with regard to its points in which we are interested) would have occurred, despite that condition being absent or

³ See Fabbri and Curzi (forthcoming) for a more detailed description of the reasons why social sciences’ orientation towards individuality implies that the explanation of an individual social phenomenon relies upon different categories than those of necessary and probable causation. Here, we would like to add that, compared with probability (i.e. the relative frequency with which an event occurs within a long series of tests which are repeated under similar conditions), which must be tested on the basis of a complex survey (Hempel, 1966), the “objective possibility” of an event can be empirically ascertained on the basis of the comparison between only two single and critical empirical cases (Weber, 1922; Protti, 1983).

⁴ General rules of experience are also called by Weber (1906) as general rules of the “becoming” and general rules of “happening” in order to emphasize the idea that general rules deal with the course of events during their development.

altered. On the contrary, one or more conditions must be regarded as causally adequate conditions for the objective possibility of the event where, according to general rules of experience, it is possible to conclude that, with regard to the points in which we are interested, the course of the event would have developed in a different way, if that conditions had been absent or altered.

2.1.2 The function and logical structure of theories

In connection with the formulation of the conditional explicative scheme (Weber, 1906), Weber (1904) qualifies the function of theories within social sciences, and the process for their conceptual framing, thus their logical structure.

According to Weber (1904), theories are made up of general rules of experience and general concepts. As it has been mentioned above, general rules of experience highlight a certain course of an event to be expected where certain phenomena are present (i.e. those phenomena which are adequate conditions for the objective possibility of such course of the event). On the other hand, general concepts highlight the essential and distinctive/differentiating elements of a certain phenomenon (i.e. its qualitatively characteristic particularities and singularities)

In the eyes of Weber (1904), the development of general concepts, and general and causal rules of experience (i.e. the development of theories) must be regarded not as ends, but as means of knowledge within social sciences' field. In other words, theories function as means to know (i.e. to explain) an individual social phenomenon.

According to Weber, the function of theories affects the process for their conceptual framing, thus their logical structure.

In order to understand what has just been stated, the following point is worthy of being underlined: in the eyes of Weber (1904), real social phenomena individuality is endless, namely the aspects characterizing the “qualitatively characteristic particularity and singularity” of each social phenomenon are unlimited. Furthermore, the number and type of causes which determine whatever individual event are regarded as unlimited too. Finally, in the eyes of Weber, things do not have an intrinsic characteristic that makes it possible to isolate only one part of them, with the aim of focusing one's own attention upon only this part. As a result of that, what makes it possible to explain an individual social phenomenon is the continuous employment of specific, particular and unilateral points of view in which investigator's value ideas are expressed. These value ideas enable the investigator to select those aspects of particular phenomena, which are always endless, that he deems worthy of being known (i.e. worthy of being causally explained), and (Weber, 1906) to select, among the unlimited causal moments, those to which the elements of the phenomenon deemed worthy of being known can be causally ascribed.

However, investigator's value ideas change; thereby the specific point of view and the direction of the cognitive interest of the investigator change (Weber, 1904). As a result of that, both the aspect of the particular phenomenon deemed worthy of being known, and its explicative conditions change too. Accordingly, the content of general concepts and general rules of experience, which are needed to explain the individual social phenomenon, is changeable in a necessary way. Since the content of theoretical constructions is changeable, each time they must be formulated in a way as clear, exact and unequivocal as possible with regard to the particular point of view. Reaching this result is possible only where general concepts and general and causal rules of experience are framed as ideal types.

Ideal type is an internally consistent, and free-from-contradiction conceptual scheme which is the result of a process which makes abstraction from reality, and which is carried out by taking a specific point of view, then by isolating one or several existing or unreal elements (i.e. properties or

characteristics) of particular social phenomena which correspond to such unilateral point of view which has been taken, and, finally, by connecting them within a conceptual scheme. Since it is the result of a process of conceptual framing which makes abstraction from empirical reality, ideal type can never be observed in reality, and it lacks empirical content. In return of that, its employment offers the possibility of expressing in an unequivocal, exact and clear way what is (or can be) thought by such conceptual constructions.

Accordingly, general concepts, framed as ideal types, highlight and make it explicit in an exact, unequivocal and clear way not what in certain social phenomena is consistent with the genre, but what can be regarded as their specific characteristic, namely what represents, in accordance with a specific point of view, the aspect which makes them different, and their “qualitatively characteristic particularity and singularity”. General concepts, framed as ideal types, function as means to illustrative purposes: they express a unilateral point of view by which reality can be “lit up”, and with which it can be compared, in order to show certain significant elements of its empirical content. The ideal types of intervention research put forward by Albano (forthcoming) are an example of general concepts framed as ideal types which function as means to illustrative purposes. Fabbri and Curzi (2008) have shown how the ideal types of intervention research mentioned above can be used as terms of comparison with which a concrete case of intervention research can be compared (i.e. Social Practice Design (SDP), Cattani *et al.*, 2007, Jacucci, 2007, Jacucci *et al.*, 2007, 2006), in order to show certain significant elements of its empirical content. In addition, they have highlighted that employing these ideal types as terms of comparison with which SPD is compared, makes it possible to show that this can be regarded, with respect to some of its elements, as an intervention research which approximates to the “double-hermeneutics solution”, and, with respect to other elements, as an intervention research which approximates to the “naturalistic solution”.

In a similar way, general rules of experience, framed as ideal types, highlight and make it explicit, in accordance with a specific point of view, and in an exact, unequivocal and clear way, the direction of the conditioning relations, the specific character of the elements which have to be regarded as causally adequate conditions and the specific character of the elements which have to be regarded as objectively possible consequences. For instance (Weber, 1904; see also the overall work of Weber entitled “Wirtschaft und Gesellschaft”- “Economy and Society”), a general rule, which has been developed on the basis of an economic point of view, can highlight the objectively possible course of a non economic social phenomenon (i.e. a political, or religious, or juridical social phenomenon) which is “economically conditioned”, namely it can highlight the course of a non economic social phenomenon to be expected where an economic social phenomenon is present. In this case, the general rule is made up of general concepts, framed as ideal types, which highlight, in accordance with a specific point of view, and in an exact, unequivocal and clear way, the aspect (i.e. “the qualitatively characteristic particularity and singularity”) which makes both the social phenomenon which has to be regarded as causally adequate condition, and that which has to be regarded as objectively possible consequence, different. Furthermore, the rule has been developed by taking a point of view which deals with the conditioning that social phenomena, regarded as *economic* social phenomena, have on the direction of the course (development) of social phenomena regarded as *non economic* social phenomena. Finally, the rule serves as means to singular causal analysis purposes. In other words, this general rule functions as means to assess, with respect to an individual empirical case, whether the course of a social phenomenon, which has to be regarded, with respect to some of its elements, as a *non economic* social phenomenon, has been conditioned by another social phenomenon, which has to be regarded, with respect to some of its elements, as an economic social phenomenon.

2.1.3 The ontological assumption: social phenomena regarded as forms of social *Handeln*

In connection with the formulation of the conditional explicative scheme (Weber, 1906), and the clarification of both the function of theories within social sciences’ field, and the process for their

conceptual development, thus their logical structure (Weber, 1904), Weber (1913, 1922) specifies the ontological standpoint which orients the study of social phenomena.

In this regard, he states (1922) that forms of social *Handeln* underlie social phenomena.

According to Weber's definition (1922), *Handeln* is a human attitude (which can lie not only in acting, but also in omissions, and even in passive intentional forbearance, all of which have an "inner" or "outer" character) in so far as the agent (or agents) associates (associate) it with a subjective sense. Or, according to a slightly different definition (Weber, 1913), *Handeln* is a behaviour qualified by a subjective sense which is held or intended by the agents (or agents), even though in a way which is more or less unobserved.

On the other hand, *social Handeln* designates such form of *Handeln* which, according to the intended sense of the agent (or agents), is referred to the attitude of other individuals, and oriented in its course on the basis of that (Weber, 1922). Or, according to a slightly different definition (Weber, 1913), *social Handeln* is an attitude which: 1) according to the subjectively intended sense of the agent, is referred to the attitude of others; 2) is *co*-determined in its course by this reference endowed with sense (thus an attitude the course of which is also oriented on the basis of the expectations about a certain attitude of other individuals); 3) can be accordingly explained in an intelligible way on the basis of this subjectively intended sense (and by relying upon the usual means of causal attribution). Accordingly, *social Handeln* is a form of *Handeln* of one or several agents endowed with a subjectively intended sense which orients its course, and refers it to the attitude of other agents.

In addition, Weber (1922) points out that every form of *Handeln* and *social Handeln* always (and solely) exists as the attitude of one or several individual persons, since single human beings are the sole bearers of the attitude oriented on the basis of the sense. As a result of that, Weber comes to a way of viewing social phenomena which avoids reification, since they are viewed as phenomena not actually detachable from the agent of the real connection of the subjectively intended sense within which *Handeln*, which underlies each social phenomenon, develops and is placed.

Finally, Weber (1922) highlights that the "subjectively intended sense" is the motive that makes *Handeln* coming into being, its course, orientation, term of reference and consequences intelligible. In a pure (ideal-typical) form, the motive can lie in a rational (systematic, conscious, and intentional) reflection upon the means in connection with the purposes, upon the purposes in connection with their consequences, and upon each purpose in connection with possible alternative purposes, or in the conscious belief in the unconditional value of a certain behaviour, or in sentiments and states of feeling, or, finally, in an accustomed usage.

2.2 Implications for intervention research in organizations

Starting from what has been highlighted in the previous paragraphs, in what follows we will outline some implications of the recourse to the epistemological choice, and ontological standpoint put forward by Weber for intervention research in organizations. More specifically, we will focus our attention upon the implications concerning, on the one hand, the capabilities of theories to provide criteria to identify different ways of organizing the work situation consistent to the attainment of the desired outcome pursued by means of the change, and, on the other hand, the way of interpreting and implementing personnel's participation in the intervention research.

We have pointed out that, according to Weber (1904), social sciences' basic aim is the explanation of singular social phenomena. Accordingly, in the eyes of Weber, explanation lies in the ascertainment of the *adequacy* of the conditions for the *objective possibility* of an individual social phenomenon, and thereby it has to be regarded as a singular conditional explanation (Weber, 1906).

Furthermore, we have highlighted that, in the eyes of Weber (1904), the development of theories is not the end, but the means in the cognitive strategy of social sciences, since theories function as

means to come to the (conditional) explanation of an individual social phenomenon (function of the theory).

For this reason, theories are made up of general concepts and general rules of experience which are framed as ideal types (the process for the conceptual development of theories and their logical structure). General concepts framed as ideal types highlight, and make it explicit in an exact, unequivocal and clear way the specific character of certain social phenomena, namely the aspect which, according to a specific point of view, makes them different and can be regarded as their “qualitatively characteristic particularity and singularity”. They are terms of comparison, with which the historical reality, given in individual empirical cases, can be compared in order to show certain significant elements of its empirical content.

General rules of experience highlight a certain course of an event to be expected where certain phenomena are present (i.e. those phenomena which are adequate conditions for the objective possibility of such course of the event). Framed as ideal type, general rules of experience highlight, and make it explicit, in accordance with a specific point of view, and in an exact, unequivocal and clear way, the direction of conditioning relations. In addition, they are made up of general concepts framed as ideal types which highlight, and make it explicit, in accordance with a specific point of view, and in an exact, unequivocal and clear way, the specific character of the elements which have to be regarded as causally adequate conditions, and the specific character of the elements which have to be regarded as objectively possible consequences.

Accordingly, where this is the logical structure of the theories used in the intervention research, these theories provide criteria to conceive the organizational change in accordance with a means-ends causal scheme. In other words, they provide criteria to identify different ways of organizing the work situation consistent to the attainment of the desired outcome pursued by means of the organizational change (i.e. a desired outcome regarded as the consequence to be expected in connection with the organizational change). Indeed, theories with such logical structure express pieces of knowledge which deal with the regularities of adequate causal connections and can be used to explain (or to anticipate) the individual consequences which could possibly (not necessarily) occur in connection with certain individual conditions, in individual empirical cases.

We have highlighted above that Weber (1922, 1913) puts forward a way of viewing social phenomena as forms of social *Handeln*. This way of viewing social phenomena implies important consequences with regard to the analysis and reflection upon the existing ways of organizing the work situation carried out in order to change them with the aim of attaining a desired outcome. Indeed, where consistently employed within an intervention research, the use of the conditional explicative scheme, and that of a theory the development of which is inspired by this epistemological choice, are based on the assumption that the work situation is a form of social *Handeln*, namely a form of *Handeln* of one or several agents which is endowed with a subjectively intended sense which orients its course, and refers it to the attitude of others.

Regarded as a form of social *Handeln*, the organized work situation is not really detachable from the agent (or agents) of the real connection of the subjectively intended sense within which *Handeln* develops and is placed. Therefore, the organized work situation is not regarded as a separate object. It always (and solely) exists as the attitude of one or several individual persons, since single human beings are the sole bearers of the organized work situation regarded as social *Handeln* oriented on the basis of the sense. Regarded as social *Handeln*, the organized work situation can be neither analyzed, nor organizationally changed from the outside. Indeed, what makes both the existing way of organizing the work situation, and their consequences intelligible is the subjectively intended sense of the agent (or agents). In other words, both the existing ways of organizing such form of social *Handeln* to which we refer by employing the term “organized work situation”, and their consequences are the results of the direction *Handeln* takes in its course due to the subjectively intended sense of the agents. Since they arise from and develop within social *Handeln* process, and

since they are explained by the subjectively intended sense which orients its course, the existing ways of organizing the work situation and their consequences can be changed only from within, by the agents of the organized work situation, and by means of a change in the subjective sense which they associate their *Handeln* with (namely by means of a change in their accustomed usage, or in their states of feeling, or in their values, or by means of a rational (systematic, conscious, and intentional) reconsideration of the means with respect to the purposes, of the purposes with respect to their consequences, and of each purpose with respect to possible alternative purposes).

Two implications follow from that. On the one hand, people working in the organized work situation cannot be excluded from the analysis and intervention upon the existing ways of organizing the work situation which are carried out in order to change them with the aim of attaining a desired outcome. On the other hand, their “participation” and “contribution” have to be understood in terms of *the analysis, reflection and intervention upon the (organizational decisions concerning the) work situation carried out by people working in that situation, and by relying upon their specific knowledge of such situation.*

3. THE EMPIRICAL CASE

3.1 Description

In what follows we will describe an intervention research project which is currently being developed in an Italian medium sized athenaeum in order to change the existing ways of organizing administrative work processes.

The idea to start an intervention research aiming at changing the existing ways of organizing the administrative work processes was formalized in March 2006, when the athenaeum’s Administrative Council set up a committee responsible for the “simplification of administrative procedures” used in the overall athenaeum (i.e. in the offices of the central administration, in the departments and faculties of the athenaeum, and in other decentralized structures). This Administrative Council decided in order to supplement the organizational change process which had already been set up with the aim of improving the quality of administrative activities, and to meet the need for greater clarity and simplification of administrative work processes (and the need for the consequent suppression of needless bureaucratic weights, and clearer definition of responsibilities) arisen during both management control activity and assessment activity, the latter carried out by the assessment group of the athenaeum and concerned with the activities carried out within it. Accordingly, the committee was charged with the task of analysing and re-configuring existing administrative procedures in order to increase the efficiency and effectiveness of the administrative action which supports the implementation of the political decisions made by the athenaeum’s academic bodies. In addition it was charged with the task of drawing up work documents containing useful information to carry out the work processes which would have been analyzed and re-organized. The committee was made up of nine members: one president (a professor of organizational theory working in the athenaeum), one member of the athenaeum’s assessment group, the president of the committee charged with the task of re-forming the athenaeum’s economic and financial management, the Administrative Director, and five people belonging to the administrative personnel, namely the person in charge of the Training and Organization Office, and the person in charge of the Plan and Control Office of the central administration, one secretary of Faculty and two secretaries of Department.

Once entered upon its duties, the committee started reflecting upon the way of organizing its work. The first proposal was put forward by the president. In this regard, the following point is worthy of being underlined: some years before, the president was charged by the Administrative Council of the athenaeum with the task of leading and carrying out an intervention research, dealing with the athenaeum’s re-organization, informatization and communication, the results of which, despite the formal approval of the athenaeum’s top management and trade unions representatives, he judged to

be unsatisfactory (Fabbri and Neri, no date). According to the president, the unsatisfactory results were due to the adoption of an approach according to which the analysis and intervention were carried out by external consultants (the president himself and another professor of organizational theory working in the athenaeum). For this reason, the president suggested that within the intervention research at hand people working in the processes studied carried out the analysis and identification of change solutions. The other members of the committee, including the Administrative Director, agreed on this proposal, on the basis of the idea that only these individuals have such specific knowledge and expertise which concern the specific work processes studied, and which are needed to bring off the analysis and intervention, since they work in such processes, while an external consultant doesn't, nor would s/he be able to learn that sort of knowledge and expertise, since s/he doesn't work in such processes. Having agreed on this issue, the following schedule of activities was defined. First of all, the procedures/administrative work processes judged to be "priority procedures/processes" would have been selected; furthermore, the members of the committee belonging to administrative personnel would have been in charge of the analysis and re-configuration of the work processes selected; in addition they would have also identified the members of the working groups that would have actually carried out the analysis and intervention having regard to create working groups within which all central and decentralized structures/offices where the work processes studied take place were represented. Finally, the members of the committee agreed upon the fact that working groups' members would have had to draw on complementary theoretical and methodological knowledge in order to be able to analyse and change their own work processes. For this reason, an external expert was asked to cooperate in the intervention research, with the task of supporting, together with the president of the committee, administrative personnel's learning of the theoretical criteria and concepts and methodological knowledge needed to analyse and change their own work processes, by means of appropriate training actions.

On the basis of these decisions, the intervention research started in October 2006, when the first series of training actions was carried out and three administrative procedures/work processes were selected in order to start their analysis and reconfiguration.

Training actions are the central portion of the development of the intervention research at hand; at least in part, they actually overlap with work process analysis and change. More specifically, training actions go through three main stages.

In the first stage, external experts (the president of the committee who is a professor of organizational theory and the external expert who was asked to cooperate in the intervention research) first introduce working groups' members to the theoretical concepts and criteria which will be used to analyse and change their work processes.

These concepts and criteria are obtained from the "teoria dell'agire organizzativo" (TAO) (Maggi, 1990, 2003) (i.e. the theory of organizational *Handeln*). According to TAO, the overall organized work situation is the result of structural actions and decisions concerning "process desired outcomes", "technical knowledge", "tasks' control and coordination", and "individuals' control and coordination". Structural decisions aim to build an order by means of rules that can be formal and informal, tacit and explicit, conscious and unconscious, previous or intrinsic to actions, autonomous or heteronomous; in addition, previous rules, both autonomous and heteronomous, can be discretionary or not discretionary. Furthermore, according to TAO, it is possible to improve the degree of the attainment of the desired outcomes of the process, and its effectiveness, efficiency and quality, by increasing the degree of the relative and reciprocal congruence among its analytical components; the reciprocal congruence among the process analytical components has to be regarded as their reciprocal adequacy according to general and causal rules of experience.

After having described theoretical concepts and criteria, external experts show practically, by making reference to individual empirical cases used as illustrative examples, how to use them in order to analyse and change organized work processes.

During this first stage, the aim of the activities carried out by external experts is not the “transfer” of methodological knowledge and theoretical criteria and concepts that working groups’ members need to analyse and change their own work processes. External experts are aware of the fact that when they describe theoretical criteria and concepts, and show how to apply them to analyse and change work processes, they put in place a communication which doesn’t deal with criteria, concepts, or ways to use them, but with words, statements and discourses on theoretical criteria, concepts, and the way to use them (Maggi, 2004). Therefore, in the first stage, the basic end is to provide working groups’ members with the opportunity to get used to the meaning of the concepts, their definitions, and to become aware of the “unusual” way to use them.

In the second stage, working groups’ members try to analyse and change their own work processes by using the theoretical concepts and criteria outlined above. More specifically, supported by external experts, they seek to isolate one or several structural decisions concerning “process desired outcomes”, “technical knowledge”, “tasks’ control and coordination”, and “individuals’ control and coordination”, to imagine them absent or altered, and to judge whether an increased degree of congruence with respect to other structural decisions, and thus an increased degree of process effectiveness, efficiency and quality, could occur given these changes, and according to general and causal rules of experience.

Finally, in the third stage working groups’ members submit the results of their work of analysis and re-conception of the existing ways of organizing their own work processes to external experts. However, external experts do not go into the merits of the organizational change solutions identified by working groups’ members. Instead, they make sure that working groups’ members are properly learning the theoretical concepts and criteria, and the way to use them. For instance, they ascertain that theoretical concepts obtained from TAO are not used to describe an actual and existing work process. Indeed, this is the most frequent mistake made by working groups’ members. This may be due to the fact that the committee mentioned above was formally charged with the task of simplifying administrative *procedures*, and to the fact that the administrative personnel of the athenaeum at hand commonly use this concept to refer to a set of prescriptions which define how a course of action, a chain of real and existing activities, should be, in order to ensure that they are carried out according to predetermined ways. In turn, interpreting and using this concept according to this definition involve focusing the attention upon the chain of real and existing activities, and on (the description of) an actual and existing work process. On the contrary, the way in which the concepts obtained from TAO should be employed requires working groups’ members to imagine one or several, and even all the structural decisions, which can be isolated in the analysis of the work process, altered. In other words, it requires them to make abstraction from the empirical reality given in individual cases. Furthermore, external experts make sure that the analytical distinctions provided by TAO are properly used by working groups’ members. For instance, according to TAO, structural actions and decisions concerning “tasks’ coordination and control” have to be distinguished from structural actions and decisions concerning “individuals’ control and coordination”. However, working groups’ members have a lot of difficulties in distinguishing the elements of the work process that can be viewed as structural decisions concerning tasks’ assignments (namely structural decisions concerning “individuals’ control and coordination”) from those which can be viewed as structural decisions concerning instrumental actions (or tasks) with respect to the pursuit of desired outcomes (namely structural decisions concerning “tasks’ coordination and control”).

As it has been said above, the intervention research started in October 2006, when the first series of training actions was carried out, and the analysis and reconfiguration of the first three administrative procedures began. However, at the end of February 2007, namely four months later,

proposals of organizational changes concerning only two procedures were submitted to the Administrative Council for their approval, and at the end of June 2007, namely eight months after the beginning of the work of analysis and reconfiguration of the first three procedures, the work concerning only one of them came to an end.

In this regard, the following fact is worthy of being underlined: at the beginning of 2007, the Administrative Council of the athenaeum set up a new committee in charge of drawing up new regulations concerning one of the three administrative work processes that had been already analyzed and changed as a result of the work led by the committee for the simplification of administrative procedures. The new regulations would have probably affected and changed the development of the process at hand. Despite that, once entered upon office, the new committee started and carried out its work without any coordination with the work led by the first committee. As a result of that, when the work of the new committee came to an end, working groups' members led by the committee for the simplification of administrative procedures had to analyze the process at hand once again, in order to assess the adequacy/degree of congruence of the changes following from the new rules.

Nevertheless, at the end of June 2007, the Administrative Director started expressing his concerns about the capability of the committee for the simplification of administrative procedures to attain visible results within a reasonable time.

Actually, these concerns were rooted, at least in part, in the complaints about the time needed to analyse and reconfigure each single administrative procedure made by administrative personnel who were taking part in the intervention research. Actually, taking part in the analysis and intervention upon the administrative work processes is a time-consuming work because of the time groups' members need to learn the way in which to apply theoretical criteria and concepts to analyse and change their own work processes, and due to the quite long discussions that commonly take place among groups' members to come to an agreement about the organizational change solutions judged to be able to increase the degree of the relative congruence of the process studied. Some members of the working groups deemed that the time needed to do that was disproportionate, and, also taking into account the inadequate number of people staffed in most of the central and decentralized administrative structures/offices compared with the amount of administrative work which usually has to be carried out, that this was able to negatively affect the regular accomplishment of administrative activities. For this reason, some members that were selected to take part in working groups came to a point where they stopped contributing to the intervention research at hand.

On the basis of the overall problematic issues briefly described above, a deep reflection upon the opportunity of changing, and supplementing some of the decisions made at the beginning of the intervention research project was developed within the committee for the simplification of administrative procedures. Indeed, given its current and prospective importance for the athenaeum, the intervention research aiming at changing the existing ways of organizing the administrative work processes couldn't be stopped. However, it was necessary to make some corrections in order to solve the problems faced by the project during its development. Accordingly, at the end of July 2007, the committee for the simplification of administrative procedures submitted the following proposals to the athenaeum's Administrative Council for their approval. First, the committee proposed to charge the Organization Department of the central administrative structure with the task of governing and leading the overall process concerning the analysis and intervention upon the existing ways of organizing administrative work processes. More specifically, the committee proposed to charge the Organization Department with the tasks of: 1) creating the working groups by selecting people among those who work in all central and decentralized structures/offices where the work processes studied take place and/or among those who are responsible for those processes; 2) coordinating the analysis and intervention carried out by several working groups; 3) updating the results of the work of analysis and intervention already carried out according to the changes

occurring during time. In addition, the committee suggested to accordingly re-define its own responsibilities. More specifically, the committee proposed to be charged with the task of ensuring continuous relationships between the Organization Department in charge of the intervention research process and the academic bodies of the athenaeum. Finally, the committee suggested that the president of the committee, and the external expert who was asked to cooperate in the intervention research continued to support, in a methodological way, working groups' members in the application of the theoretical criteria and concepts used to analyse and change their work processes.

The second proposal was the result of the problems experienced when new regulations, concerning one of the administrative processes which had been already analyzed and changed within the intervention research led by the committee for the simplification of administrative procedures, were drawn up without any coordination with the work carried out within the intervention research at hand. Being aware of the fact that new regulations or changes in existing regulations have great impact on the development of administrative work processes, and that a better coordination is needed in the production of rules and regulations in order to improve the effectiveness and efficiency of the administrative action, the committee suggested to take the following new rule into account in the future development of the decision making process carried out by the Administrative Council: new regulations or changes in existing regulations submitted by whatever subject or committee to the Council for their approval should have been submitted together with an analysis of their "feasibility", namely an analysis of their adequacy/degree of congruence. In addition, the committee suggested to make the Organization Department responsible for this analysis. In other words, the committee proposed to integrate this analysis into the work aiming at changing the existing way of organizing administrative work processes.

The last problem which needed to be solved was that which was concerned with the preservation of administrative personnel's ongoing cooperation in the intervention research. In this regard, some members of the committee first suggested to change the way in which personnel's participation had been implemented until then. More specifically, they proposed to carry out the analysis and intervention upon the existing ways of organizing administrative work processes, by relying upon information and suggestions gathered by only one member of the working groups, by means of interviews carried out with other administrative personnel working in the process studied. This was proposed in order to reduce the time that administrative personnel were spending taking part in the intervention research, and thereby to cope with the complaints they were making with regard to the time-consuming work needed to analyse and intervene upon their own work processes. In addition, this proposal was made because, according to its proponents, it would have also been able to solve the problems concerning, on the one hand, the long time of execution following from an analysis carried out by people working in the process studied, and, on the other hand, the poor results (measured by the small number of administrative procedures that had been analyzed and reconfigured since the beginning of the intervention research) ensuing from that. On the other hand, however, all members of the committee were strongly aware of the fact that, although the analysis and intervention carried out by people working in the administrative processes studied was a time-consuming work, it was providing administrative personnel with the chance to learn a new sort of knowledge, and a way to analyse, reflect and intervene upon their own work processes. Due to this reason, the committee finally decided that a different path than changing the way in which participation had been implemented until then needed to be identified in order to favour administrative personnel's ongoing cooperation in the intervention research. More specifically, the committee decided to carry out several meetings aimed at providing current and prospective administrative personnel taking part in the simplification of administrative procedures with pieces of information about the intervention research, its purposes and organization.

We are not able to assess whether (or not) these decisions were decisive to solve the problems faced by the intervention research at hand during the first months of its development or to what extent they were effective.

On the one hand, the first point which is worthy of being underlined is the fact that today the Organization Department is regularly informed about the new regulations or changes in existing regulations that are going to be drawn up, and, thanks to the work that it accordingly arranges, the new regulations (or changes in existing regulations) are submitted to the Administrative Council for their approval together with the analysis of their adequacy/degree of congruence carried out by working groups made up of members belonging to administrative personnel. We believe that this is a great result, even though it implies that an increased amount of work has to be carried out by those working in the Organization Department, and by all the administrative personnel who carry out the analysis of the adequacy/degree of congruence of the changes following from the new rules. In addition, administrative personnel have stopped complaining about the time wasted taking part in the intervention research. Furthermore, the number of requests to take part in the working groups (who carry out the analysis and intervention upon the existing ways of organizing administrative work processes) made by people working in the central and decentralized structures/offices where the processes studied take place, has increased. Finally, as it has been pointed up in the last meeting carried out with administrative personnel working in the Faculties and Departments of the athenaeum, an hypothesis has started propagating, namely among people working in the Organization Department: the hypothesis that the theoretical concepts and methodological knowledge, that administrative personnel are learning in order to analyse and change their own work processes with the aim of increasing their effectiveness and efficiency, could also be effectively used to start new intervention research projects aiming at meeting new needs dealing with the health and safety of people working in Public Administrations, and the quality certification of the services provided by Public Administrations, expressed by the stakeholders of the athenaeum's administrative action (i.e. the Public Function Department of the Italian Ministry of Public Administration and Innovation and the new chancellor's delegate on Organization who entered upon office in the December of 2008).

On the other hand, however, some problems still remain unsolved. More specifically, the analysis and re-configuration of each single administrative work process still require a lot of time, and, as a consequence of that, very few administrative procedures have been analyzed and reconfigured as yet.

3.2 Discussion

At the beginning of the introductory paragraph, we stated that the empirical case of intervention research described above can be regarded as an intervention research prevalingly directed by the epistemological choice put forward by Weber, and the related ontological standpoint according to which the organized work situation is seen as a form of social *Handeln*.

We maintain that on the basis of the following points.

First, the theoretical concepts and criteria which are used in the analysis and intervention upon the existing ways of organizing administrative work processes are clearly framed on the basis of the epistemological choice of Weber. Indeed, TAO is made up of general concepts (i.e. “process desired outcomes”, “technical knowledge”, “tasks’ control and coordination”, “individuals’ control and coordination”) which are ideal types: each of them expresses an unilateral point of view by which the organized work situation “can be lit up” and to which it can be compared in order to show certain significant elements of its empirical content. Furthermore, according to TAO, an improvement in the degree of the attainment of the desired outcomes of the process, and in its effectiveness, quality and efficiency, are possible (not necessary) consequences of an increase in the degree of the relative and reciprocal congruence among previous structural decisions concerning

“process desired outcomes”, “technical knowledge”, “tasks’ control and coordination”, and “individuals’ control and coordination”. Therefore, TAO provides the following criterion to identify different ways of organizing work processes aiming at improving their effectiveness, quality and efficiency: assessing the congruence of each structural decision with respect to all other structural decisions, and identifying different decisions deemed to be more congruent.

Second, the way in which the concepts and criteria obtained from TAO are applied to analyse and intervene upon the existing way of organizing administrative work processes is clearly based on the path outlined by Weber in order to ascertain the adequacy of the conditions for the objective possibility of an event. In other words, this way is based on the same basic logical operation which lies in isolating one or several structural decisions concerning “process desired outcomes”, “technical knowledge”, “tasks’ control and coordination”, and “individuals’ control and coordination”, in imagining them absent or altered, and in judging whether an increased degree of congruence/adequacy with respect to other structural decisions, thereby an increased degree of process effectiveness, efficiency, and quality, could occur given these changes and according to general and causal rules of experience. As a result of that, the assessment of the congruence lies in the assessment of the adequacy, and, more specifically, in the formulation of a judgement of objective possibility which is based on general and causal rules of experience.

Third, within the intervention research at hand administrative personnel’s participation is *prevalingly* interpreted and implemented as *the organizational analysis and intervention carried out by administrative personnel working in the administrative work processes studied, by relying upon their specific knowledge of each specific process, and by drawing on complementary theoretical and methodological knowledge which administrative personnel learn by means of the analysis and intervention upon their own work processes.*

As it has been pointed out, this way of implementing personnel’s participation was the first suggestion put forward by the president of the committee in order to organize the intervention research at hand. This president suggested (here we can say it explicitly) according to the idea that the organized work situation is a form of social *Handeln* which can be analyzed and changed only from within, by people working in the work situation, and by changing the sense which they associate their social *Handeln* with (namely by means of a change in their accustomed usage, or in their states of feeling, or in their values, or by means of a rational (conscious, systematic and intentional) reconsideration of the means in connection with the purposes, of the purposes in connection with their consequences, and of each purpose in connection with possible alternative purposes).

Furthermore, as it has been said above, the other members of the committee agreed on this proposal on the basis of the idea that only people working in the processes studied have such specific knowledge and expertise which concern those specific work processes, and which are needed to bring off the analysis and intervention, since they work in such processes, while an external consultant doesn’t, nor would s/he be able to learn that sort of knowledge and expertise, since s/he doesn’t work in such processes. In other words, the other members of the committee agreed with the president on the basis of the idea that knowledge needed to change work processes is, at least in part, not really detachable from each single work process; accordingly, it cannot be transferred to other individuals or processes in a nutshell (Fabbri, 2003).

This way of conceiving knowledge is clearly the result of a (neither necessarily conscious, nor conceptually expressed) way of viewing the organized work situation as a form of social *Handeln*, namely a form of *Handeln* of one or several agents endowed with a subjectively intended sense which orients its course, and refers it to the attitude of others. In this regard, Weber (1922) highlights that every form of *Handeln* has a technique, this understood as the set of means employed in connection with the subjectively intended sense which actually orients each single form of *Handeln*. Furthermore, he points out that the decisions about the technique of every form of

Handeln are based on knowledge. In other words, according to Weber, decisions about the means employed rely upon knowledge, and the means employed are, in turn, related to the sense which actually orients each single form of *Handeln*. Accordingly, knowledge on the basis of which the means of *Handeln* are settled is not really detachable from the real connection of the subjectively intended sense within which each single form of *Handeln* develops and is placed.

To sum up, conceiving the organized work situation/process as a form of social *Handeln* involves acknowledging that it can be analysed and changed only from within (the assumption of the president of the committee) and that knowledge needed to change each work process is, at least in part, not really detachable from it, thus unable to be transferred to other agents or processes in a nutshell (the assumption of both the president and the other members of the committee). This, in turn, implies the possibility of interpreting and implementing personnel's participation in terms of *organizational analysis and intervention carried out by people working in the work process studied*.

However, as it has been briefly mentioned, within the intervention research at hand, personnel's participation is *prevalingly* interpreted and implemented in this way. Actually, in some cases personnel's participation was interpreted and implemented as *informative and advisory support to the organizational analysis and intervention carried out from the outside*, by only one member of each working group who, in these cases, worked as a third analyst. In these cases, the intervention research was characterized by syncretism, since the epistemological choice put forward by Weber, and a consistent conceptual scheme were used together with a way of interpreting and implementing personnel's participation which is the expression of an inconsistent (and incompatible) ontological standpoint.

Two conditions seem to have favoured that.

First, syncretism occurred whenever working groups' members interpreted the desired outcome of the intervention research in terms of increasing the efficiency and effectiveness of administrative *procedures*, these understood as a set of prescriptions which define how a course of action, a chain of real and existing activities, should be, in order to ensure that they are carried out according to predetermined ways. Where it's used according to this definition, this term expresses a way of conceiving the organized work situation as a social system predetermined with respect to individuals (Maggi, 1990), namely as an *ex ante* reified and objective reality, and, as such, as a reality which can be analyzed and observed from the outside. As it has been pointed out (Fabbri and Curzi, forthcoming), this, in turn, implies the possibility of interpreting and implementing personnel's participation as *informative and advisory support to the organizational analysis and intervention carried out from the outside, by a third analyst*.

Second, syncretism occurred whenever personnel's participation implemented as *informative and advisory support to the organizational analysis and intervention carried out by a third analyst* was deemed to be able to solve the problems concerning, on the one hand, the long time of execution following from an analysis carried out by people working in the process studied, and, on the other hand, the poor results (measured by the small number of administrative procedures which had been analyzed and reconfigured since the beginning of the intervention research) ensuing from that.

In other words, while the members of the committee agreed to implement personnel's participation as *the organizational analysis and intervention carried out by administrative personnel working in the administrative work processes studied*, because they deemed that this was needed to favour the intervention research effectiveness, namely to come to the identification of different ways of organizing administrative work processes able to increase their quality, effectiveness, etc., this way of interpreting and implementing personnel's participation was questioned every time that it was judged to be the cause of the poor efficiency of the intervention research. Accordingly, we believe that a reflection upon the most appropriate criterion which should be used to assess an intervention research *prevalingly* directed by the epistemological choice put forward by Weber, and the related way of viewing the organized work situation as a form of social *Handeln*, is needed. This will help

to judge whether the most appropriate criterion is that which deals with the efficiency of the intervention research, or that which deals with its effectiveness. This issue is addressed in the following section.

4. THE CRITERION TO ASSESS THE INTERVENTION RESEARCH PREVAILINGLY DIRECTED BY WEBER'S EPISTEMOLOGICAL CHOICE AND ONTOLOGICAL STANDPOINT

In order to address the issue concerning the most appropriate criterion to assess an intervention research prevailingly directed by Weber's epistemological choice and ontological standpoint, we will first make reference to the ideal types of assessment situations put forward by Thompson (1967). Then, by identifying the ideal type of assessment situation which is approximated by an intervention research prevailingly directed by Weber's epistemological choice and ontological standpoint, we will highlight the most appropriate criterion to assess it.

Thompson (1967) has developed four ideal types of assessment situations on the basis of the conditions of certainty and/or uncertainty concerning the standard of desired outcome and the most appropriate means of attaining it.

In the first ideal type, both the standard of desired outcome and the means are certain (i.e. the standard of desired outcome is crystallized⁵, and knowledge about cause-effect relationships is complete). Accordingly, the assessment is based on the test of efficiency. In other words, it is possible to assess whether a certain outcome has been reached at the lowest cost, and by using the lowest amount of resources, or whether the highest outcome has been reached by using a certain amount of resources.

In the second ideal type, the standard of desired outcome is certain (i.e. crystallized), while the means are uncertain (i.e. knowledge about cause-effect relationships is incomplete). Accordingly, the assessment is based on the test of effectiveness (which, as Thompson points out, is less rigorous, but not less important, than that of efficiency). In other words, it is necessary to assess whether the desired outcome has been actually reached, irrespective of the cost and time employed to reach it.

In the third ideal type, the standard of desired outcome is uncertain (i.e. ambiguous), while the means are certain (i.e. knowledge about cause-effect relationships is complete). In the fourth ideal type, both the standard of desired outcome and the means are uncertain (i.e. the standard of desired outcome is ambiguous, and knowledge about cause-effect relations is incomplete). Accordingly, in both of these cases, the assessment is carried out by relying on the comparison with reference groups, used as reference standard on which one's own self-assessment is based.

Where intervention research is prevailingly directed by Weber's epistemological choice and ontological standpoint, which views the organized work situation as a form of social *Handeln*, the *actual* distinction between the researcher and the research object is replaced by the *analytical* distinction between two processes of actions and decisions, namely the primary process and the intervention research which aims at changing the primary process (Albano, forthcoming). This, in turn, involves viewing intervention research as a reflection upon the primary process (Albano, forthcoming). More specifically, it involves viewing intervention research as organizational learning, this understood according to the definition and way of viewing it put forward by Fabbri (2003).

Fabbri (2003) defines organizational learning as the development of the capability of a (primary) process to structure its own continuous change. Furthermore, according to Fabbri (2003),

⁵ Thompson (1967) uses this term to express the idea that some of the desired outcomes of an organization are clearer (therefore relatively less uncertain and ambiguous) than others, even though none of them can be entirely clear or completely cleared, since they change continuously (and, as a result of that, they must be regarded as desired outcomes instead of goals).

organizational learning should be viewed as a *secondary process*- namely a process of reflection upon the primary process structuration, and the degree of the relative and reciprocal congruence among its analytical levels of actions and decisions- and as a *supporting process*- since the reflection aims at improving the degree of the attainment of the primary process desired outcomes (i.e. quality, effectiveness, efficiency, health and safety of subjects acting in the process, etc.).

Finally, according to the author, the organizational learning process should be regarded as a component which can be only analytically distinguished, but not actually detached, from the organizational change, and as the condition that makes the organizational change (objectively) possible.

This way of viewing intervention research (i.e. as a secondary and supporting process) is based on the assumption that the standard of its desired outcome is certain (i.e. crystallized).

Oriented towards a desired outcome, intervention research is (in its ideal- typical form) a purposively rational process (Fabbri, 2003), namely a process oriented on the basis of a rational (conscious, systematic, and intentional) reflection upon the means in connection with the purposes, upon the purposes in connection with their consequences, and upon each purpose in connection with possible alternative purposes (Weber, 1922). However, in an intervention research prevalingly directed by Weber's epistemological choice and ontological standpoint, the means employed, unlike the standard of desired outcome, are uncertain (i.e. knowledge about cause-effect relations is incomplete). This is due to the logical structure of the theories used in the analysis and intervention, and to the epistemological choice which inspires their conceptual framing. Indeed, the different ways of structuring the primary process are identified drawing on knowledge dealing with the regularities of causal connections judged to be adequate, rather than with necessary cause-effect relations. Therefore, the different structural decisions, identified by drawing on this sort of knowledge, can make certain outcomes (consequences) (objectively) possible, but they do not ensure that they will necessarily or infallibly occur.

To sum up, within an intervention research prevalingly directed by Weber's epistemological choice and ontological standpoint, the standard of desired outcome is certain, while the means are uncertain. Therefore, the intervention research approximates to the second ideal type of assessment situation put forward by Thompson (1967). Accordingly, it can be assessed by relying upon the test of effectiveness. In other words, it is necessary to assess whether the intervention research identified structural changes which actually led to an improvement in the degree of the attainment of the desired outcomes of the primary process (i.e. effectiveness, efficiency, quality, health and safety of the subjects acting in the process). This, in turn, implies that the assessment (of the outcomes) of the secondary and supporting process lies in the assessment of the outcomes of the primary process. It is worthy underlining that, for this aim, it is possible, in some cases and under certain conditions, to rely upon quantitative values which serve as means to measure the degree of the attainment of the desired outcomes of the primary process. In these cases, on the basis of the changes of these values, it will be possible to assess whether the primary process expresses a capability to structure its own course, and continuous change, which is more adequate (valid) with respect to the degree of the attainment of its desired outcomes, and, on the basis of that, it will be possible to assess whether (and to what extent) the secondary and supporting process (i.e. the intervention research) attained its desired outcome.

Concluding, we would like to highlight that, with regard to the intervention research described in the previous paragraph, neither the awareness of the most appropriate criterion to assess it has been gained, nor a set of values to measure its effectiveness has been developed by the Organization Department or the assessment group of the athenaeum, as yet. However, we believe that the following points are worthy of being underlined in connection with the issue concerning the effectiveness of the intervention research at hand.

The first point is that the learning of a new sort of knowledge, and of a way to analyse, reflect upon, and change administrative work processes on the part of (at least some of the people belonging to) administrative personnel, has been already numbered among the results attained by the intervention research at hand.

The second point is that this result is the reason why within the intervention research at hand personnel's participation is still prevalingly implemented in terms of *organizational analysis and intervention carried out by people working in the work process studied*. In other words, despite the analysis and intervention upon each single administrative work process carried out by people working in such process is widely regarded, by those taking part in the intervention research at hand, as a time-consuming work, actually able to negatively affect the regular accomplishment of administrative activities, and the efficiency of the intervention research, personnel's participation is still prevalingly implemented as mentioned above, since this way of implementing personnel's participation is judged to be able to provide administrative personnel with the chance of learning a new sort of knowledge and a way to analyse, reflect and intervene upon their own work processes.

The final point is the hypothesis which has started propagating among people working in the Organization Department which is currently in charge of the coordination of the intervention research at hand: the hypothesis that the theoretical concepts and methodological knowledge, that administrative personnel are learning in order to analyse and change their own work processes with the aim of increasing their effectiveness and efficiency, could also be effectively used to start new intervention research projects aiming at meeting new needs dealing with the health and safety of people working in Public Administrations, and the quality certification of the services provided by Public Administrations, expressed by the stakeholders of the athenaeum's administrative action.

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References

- Albano R. (forthcoming). La ricerca intervento. In Fabbri, T.M. and Solari, L. (Eds). *Organizzare: concetti e metodi*. Carocci, Roma.
- Bargal, D. (2006). Personal and intellectual influences leading to Lewin's paradigm of action research. In *Action Research*, vol. 4, n. 4, pp. 367- 388.
- Bonzanini, A. and De Masi, D. (1984). *Storia, metodologia e tecniche della ricerca empirica in sociologia del lavoro e dell'organizzazione*. In De Masi, D. and Bonzanini, A. (eds). *Trattato di sociologia del lavoro e dell'organizzazione*. La ricerca. Franco Angeli, Milano
- Cattani, C. and Jacucci, G. (2007). From software development service provider- helas, a captive resource!- to one's own products and brand: maximising rigour and relevance in organizational problem solving. In *AIS eLibrary Proceedings of MCIS2007*, in Venice, Italy.
- Fabbri, T. M. (2003). *L'apprendimento organizzativo. Teoria e progettazione*. Carocci, Roma.
- Fabbri, T. M. and Curzi, Y. (Forthcoming). *Sicurezza sul lavoro: un percorso possibile. Lezioni dal caso ThyssenKrupp*.
- Fabbri, T. M. and Curzi, Y. (2008). Understanding Social Practice Design and confronting it with an alternative approach to action research. In *Program and Discussion Papers of the fourth Alpine Ski Seminar on Information Systems 2008*, pp. 43-49. *AIS Proceedings of Alps 2008*, in Carisolo, Italy.

- Fabbri, T. M. and Neri, M. (no date). L'organizzazione dei sistemi informatici nell'università. University of Modena e Reggio Emilia.
- Gilli, G. A. (1971). Come si fa ricerca: guida alla ricerca sociale per non-specialisti. Mondadori, Milano.
- Grandori, A. (1996). Disegni di ricerca in organizzazione. In Costa, G. and Nacamulli, R.C.D. (eds). Manuale di organizzazione aziendale, vol. 5- Metodi e tecniche di analisi e intervento. Utet, Torino.
- Hempel C. (1966). Philosophy of Natural Science. Prentice Hall, Englewood Cliffs (New Jersey).
- Jacucci, G. (2007). Social Practice Design (SPD), Pathos, Improvisation, Mood, and Bricolage: a Mediterranean way to Make Place for IT?. In AIS eLibrary Proceedings of MCIS2007, in Venice, Italy.
- Jacucci, G., Tellioglu, H. and Wagner, I. (2007). Design Games as a part of Social Practice Design: a case of employees elaborating on organizational problems. In AIS eLibrary Proceedings of MCIS2007, in Venice, Italy.
- Jacucci, G. and Wagner, I. (2006). Practices and cultures of knowledge management in global virtual (software) and real component manufacturing. In AIS eLibrary Proceedings of MCIS2006.
- Lewin, K. (1946). Action research and minority problems. In Journal of Social Issues, vol. 2, n. 4, pp. 34- 46.
- Maggi, B. (1990). Razionalità e Benessere. Studio interdisciplinare dell'organizzazione. Etas Libri, Milano.
- Maggi, B. ([1996] 1997). Analisi e progettazione del lavoro per la tutela della salute. L'orientamento innovativo del d.lgs.626/94. [In Sociologia del diritto, XXIII, 2, 5-39]. In Montuschi, L. (ed), Ambiente, salute e sicurezza: per una gestione integrata dei rischi da lavoro. Giappichelli, Torino, pp. 323-350.
- Maggi, B. (2003). De l'agir organisationnel. Un point de vue sur le travail, le bien-être, l'apprentissage. Octarès Editions, Toulouse.
- Maggi, B. (2004). Peut-on transmettre savoirs et connaissances?. Transmettre, IV Rencontres APST-APRIT - Marseille, 24-26 June.
- Protti M. (1983). Max Weber e la ricerca empirica nell'industria. In Weber, M. Metodo e ricerca nella grande industria. Franco Angeli, Milano.
- Thompson, J. D. (1967). Organizations in Action. McGraw-Hill, New York.
- Weber, M. (1904). Die "Objektivität" sozial-wissenschaftlicher und sozialpolitischer Erkenntnis. In Gesammelte Aufsätze zur Wissenschaftslehre. Mohr, Tübingen, 1922.
- Weber, M. (1906). Kritische Studien auf dem Gebiet der kultur-wissenschaftlichen Logik. In Gesammelte Aufsätze zur Wissenschaftslehre. Mohr, Tübingen, 1922.
- Weber, M. (1913). Über einige Kategorien der verstehenden Soziologie. In Gesammelte Aufsätze zur Wissenschaftslehre. Mohr, Tübingen, 1922.
- Weber, M. (1922). Wirtschaft und Gesellschaft, vol. I. Mohr, Tübingen, 1922.

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