

How Can Philosophy Help Management and How Can Management Help Philosophy? Towards a Holistic Approach for Management Education

Cristiano Ciappei & Maria Cinque

- 1. Università degli Studi di Firenze
- 2. Fondazione Rui, Roma

DOI: 10.17421/2498-9746-01-24

Abstract

The recent and on-going global economic crisis with its failures of responsibilities and the threatening of natural and socio-cultural ecologies are among many more manifestations of a profound disintegration and non-integral way of living. Many further symptoms and realities as well as ethical inadequacies and reductive understandings and orientations call for a more sustainable integration. This article is based on the premise that re-considering philosophical concepts can be an apt medium for realizing such integral understanding and practice. Philosophical techniques and approaches can help clarify and evaluate the aims and values of management education. On the other side, management studies and management education can contribute to the on-going revitalization of philosophy as an integral and sustainable practice and medium for the emergence of relational realities of leadership and organisation. This is why we explore the dimensions of the action and the dimensions of the agent, recalling both Aristotle's and Kant's theories. Our goal is to develop a 'holistic' model on philosophical basis that may open new streams of research in management education and may call for a more sustainable, 'integral' model of management in organizations. We also provide some examples of the application of this model to management education, assuming that ancient wisdom can embrace practical problem solving of business, human, and social issues.

CRISTIANO CIAPPEI & MARIA CINQUE

CONTENTS

1	Introduction	340
2	How can philosophy help management and how can management	
	help philosophy?	341
3	'Re-habitualising' ancient wisdom for management education $\ \ldots \ \ldots$	342
4	The proposal of a model for management education $\ \ldots \ \ldots \ \ldots$	345
5	The application of the model	347
6	Conclusion	352
N	otes	353

1 INTRODUCTION

Criticism of business schools and management education is not a novel idea and it has, over the last decades, repeatedly been uttered. Most recently, students of economics from 19 countries have published a call for rethinking business theories and for a renewal of management education¹. Thus, they echo the findings and arguments of a wide range of articles and books pointing out the failure of business schools to educate well-prepared managers.

Bachmann, Loza Adaui and Habisch² identify three types of criticism commonly addressed to business schools: an inadequate intra-system logic, an insufficient toolbox, and unfitting educational environments and methods, corresponding to a macro-, meso-, and micro- level design of management education. In order to find an answer to these critics they introduce the concept of 'practical wisdom' and, basing on an extensive, cross-disciplinary analysis of the concept — considering on philosophical, theological, psychological, and managerial perspectives - they propose a holistic approach for the renewal of management education developing a three-pillar model of practical wisdom. The first pillar embraces the integrative dimension and includes deliberation, the passing of judgment, balancing, and integration directed at action and practice. The second pillar is concerned with the normative dimension and includes all sorts of knowledge about or orientation towards a normative guidance concerning the fulfilled life and what comes beyond. The third pillar is concerned with cultural heritage that is being transmitted from generation to generation through various kinds of traditions. But this is not the first attempt to link management to other disciplines, in particular to philosophy.

2 HOW CAN PHILOSOPHY HELP MANAGEMENT AND HOW CAN MANAGEMENT HELP PHILOSOPHY?

Mary Parker Follett, a pioneer in the fields of organizational theory and one of the first authors to write on management, in the 20's and early 30's, described management as philosophy. D. Melé³ (2006) observes that Follett was already aware that we can never wholly separate the human and the mechanical problem: «the study of human relations in business and the study of the technique of operating are bound up together»⁴. This seems to her so evident that she felt the obligation to add: «This would seem obvious to mention if we did not so often see that separation made»⁵. As more recently March⁴ highlighted, «consequentialist reasoning is the basis for most of modern social and behavioural and pre-eminently for economics»⁷.

This is why Ledoux⁸ points out that the main contribution of philosophy to management is «to relentlessly question the adequateness of our representations»⁹, to invite managers, always, to recognize and change their representations pro-actively, before they 'act' or 'manage'. The reason why philosophy can help managers cast light into the dark corners of the organisation's world is that it goes straight to the deepest level (the 'ontological level') of thinking, which is the nature of existence itself¹⁰.

According to Deleuze and Guattari¹¹, philosophers are engaged in an endless struggle with the chaos and with opinions that pretend to protect mankind from chaos. Indeed mankind continuously produces umbrellas to protect itself from chaos, umbrellas upon which it engraves conventions and opinions. But philosophers, as scientists and artists also do, continuously attempt to tear away these umbrellas so that some light may shine in. In this sense, philosophy, which continuously invites us to clarify our relation to the world, can help managers regularly challenge their representations of the world, to unfreeze and revitalize them, to think about the blind spots in their representations, to think what had not been thought through, to think the un-thinkable.

On the other side, management can help re-considering philosophical concepts for a more sustainable integration of understanding and practice. As Küpers¹² points out, management studies and management education can «contribute to the on-going revitalization of practical wisdom as an integral and sustainable practice and medium for the emergence of relational realities of leadership and organization»¹³. The author considers practical wisdom — phenomenologically — as an embodied, emergent, and responsive inter-practice, in relation to organising and leading. Based on these insights and applied to organisation and leadership, practical wisdom can be

conceptualised as professional artistry¹⁴.

R. de Borchgrave¹⁵ wrote that «philosophy is strategy in essence», the term strategy being more often linked to management. Klempner¹⁶ claims that «philosophical understanding does not occur in a *vacuum*. It has a point, a purpose. Philosophical inquiry, whose primary focus is not — in its very core and essence - practical, is not merely an idle game or waste of time: it fails by its own rigorous criterion of truth. In other words, truth is praxis, or it is nothing»¹⁷.

This is why business schools are the only schools of philosophy, along with the confessional ones, that manage (or try to manage) to change the world through educational programs.

«Managing consists of leading a company from its current position to a future position that is better in relative terms»¹⁸: leading a human team (managing always means managing people) to change the current situation and obtain results in an efficient way (at least in business organizations). Management is, first and foremost, action. We must therefore turn to action theory, which has traditionally been the preserve of economic science, as a first step in understanding what people-management consists of.

As Argandoña¹⁹ observes, «the increasingly frequent and forceful criticisms of management sciences suggest that we need a new model. In fact, the number of proposed alternatives has multiplied, with some suggesting that the range of economic points of departure be extended, while others turn to different sciences (sociology, psychology, neuro-economics, political sciences, philosophy) for their inspiration»²⁰. This author also suggests returning to the origins of economic science, action theory, with a broader approach that takes in the contributions of realist philosophy (Aristotle, Thomas Aquinas) with a view to laying the foundations for a richer organizational theory in which ethics plays a clearer role.

3 'RE-HABITUALISING' ANCIENT WISDOM FOR MANAGEMENT EDUCATION

The recent and on-going global economic crisis with its failures of responsibilities²¹ and the threatening of natural and socio-cultural ecologies are among many more manifestations of a profound dis-integration and non-integral way of living. Many further symptoms and realities, as well as ethical inadequacies and reductive understandings and orientations, call for a more sustainable integration.

The following part of the article is based on the premise that

re-considering philosophical concepts can be an apt medium for realizing such integral understanding and practice. Reasons for re-habitualising ancient wisdom for our contemporary times and futures lie in its 'proto-integral' and transformative potential on all levels, especially in organizations and leadership²².

This is why we explore the dimensions of the action and the dimensions of the agent, recalling both Aristotle's and Kant's theories. Our goals can be synthetized as follows:

- 1. to develop a model on philosophical bases that may open new streams of research in management education;
- 2. to call for a more sustainable, 'integral' model of management in organizations;
- 3. to illustrate with an example the application of our model.

3.1 The dimensions of the action

Our proposal requires the clarification of some basic issues related to managing individual and collective actions. Philosophers who studied 'human action', starting from Aristotle, already analysed these themes. The Aristotleian thought remains a solid point of reference for shedding light on the developments of modernity and post-modernity and its terminology should also be helpful to improve the understanding of the strategic role of management in business, government, or non-profit sectors.

Consequently, before presenting the application of Aristotle's theories to management education, we will introduce the terminology used by the philosopher.

The Aristotelian terms *praxis* and *episteme theorica* are different in that *episteme theorica* indicates the theoretical knowledge, something that deals solely with demonstrable trends, whereas *praxis* represents the realm of possible actions that men can be engaged in. As such, *praxis* is also distinguished from the Aristotelian term for *poiesis*, associated with that which is advantageous or attractive to produce. Traditionally, the following hierarchy for these three terms has been formulated: *theoria* (demonstrable trends) — *praxis* (possible actions) — *poiesis* (productive results).

The theoretical framework that we propose here consists in re-visiting the distinction between *praxis* and *poiesis*, but it is no simple rehashing of the classical separation between the occupational activities of slaves or artisans and the ethical and political activities of free men. It may well seem anachronistic to re-propose the above Aristotelian distinction for a post-industrial

and globalized society. As a matter of fact, we believe that the difference between our contemporary society and that of Aristotle is not only a matter of different technologies or different manners of organizing labour.

In the so called 'information and knowledge society' services have outclassed products, that used to be the results of the activities of *poiesis*. Services have come to meet the evolved needs of society. The creation of value by companies is essentially connected to the concepts of wisdom and knowledge. Aside from the technological aspects, these concepts could be included in the ethical and political activities implied by the Aristotelian *praxis*.

At an entrepreneurial and managerial level, management techniques have to some extent guaranteed a certain degree of efficiency and effectiveness during periods of relative stability. However, they also leave a lot of room for dissatisfaction and unrest. Corporate discipline is a sign of taking a step ahead of the technological push, to the extent that managerial techniques do not appear to enjoy greater longevity than software or fashions trends. So, Aristotelian thought, or better yet Aristotelian-Thomistic thought, still has its own charm and validity.

3.2 The dimensions of the agent

Furthermore, in our framework we take into account two more categories, the dimensions of the agent.

In generating the content for meaning, there are two fundamental relationships that are formed by the agent and the context. The agent is the relationship between the 'I' and the 'other', in conscious subjectivity. The context is the relationship between 'Me' and the 'World' in the recognized objectivity of reality.

The emancipation of the agent is understood here as an increase in *auto-nomy*. This *auto-nomy* has a dash in it because it is understood in a particular way. This is not autonomy in the sense that the agent provides his or her own individualized law but it is autonomy between the desiring *autos* and the regulating *nomos*. In this tension, we find space for the principle of government as recognition of the agent. Autonomy is an oxymoron. *Autos* refers to the desire of the self to guide its actions and satisfy itself. *Nomos* refers to a law (natural, technical, juridical, moral) that regulates actions and to some extent goes beyond the action itself. Together *autos* and *nomos* carry out the essential functions of the agent, which can be understood as managing the emergence of a desire.

This distinction comes from a later work of the 18th century philosopher Immanuel Kant. In his *Anthropology from a Pragmatic Point of View* (1798)

Kant, according to Allen Wood²³, self-consciously blurs his famous distinction between the two standpoints: a theoretical standpoint from which we regard ourselves as thoroughly determined by mechanical causes and a practical standpoint from which we regard ourselves as self-determining agents. Wood proposes that, in his *Anthropology*, Kant adopts a hybrid of these two standpoints: a theoretical standpoint from which we regard ourselves as autonomous.

Morality is based in the concept of freedom, or autonomy. Someone with a free, or autonomous, will does not simply act but is able to reflect and decide whether to act in a given way. This act of deliberation distinguishes an autonomous will from a heteronomous will. In deliberating, we act according to a law that we ourselves dictate, not according to the dictates of passion or impulse. We can claim to have an autonomous will even if we act always according to universal moral laws or maxims because we submit to these laws upon rational reflection.

4 THE PROPOSAL OF A MODEL FOR MANAGEMENT EDUCATION

Taking into account Aristotle's and Kant's theories, we created a matrix where the dimensions of the agent (*autos* and *nomos*) are represented on the horizontal axe and the profiles of action (*praxis*, *pragma* and *poiesis*) are on the vertical one.

Our framework differs from the Aristotelian theory, at least in three notable ways:

- while the classical theory presupposes a distinction between different forms of action and types of activities in relation to their objects and aims, our framework implies the presence of different aspects for every sort of activity, even when they differ in the degree of their relevance;
- 2. in addition to praxis and poiesis, pragma is added here in order to guarantee a sense of coordination and not just efficiency;
- 3. the theory proposed here is also applicable in situations characterized by heightened complexity and technological sophistication.

To further develop our framework, we also took into account a previous model²⁴, which represented corporate governance and managerial action using both dimensions.

Politics orients *praxis*, which is aimed at generating meaning by consent or dissent about the goals of an action. In a model for the business' autonomy, politics can be characterized as being self-directing. *Ethics* orders

	Autos	Nomos
Praxis		
Pragma		
Poiesis		

Table 24.1: A combination of Aristotle's and Kant's categories

	Autos	Nomos
Praxis	Politics	Ethics
Pragma	Strategy	Organization
Poiesis	Management	Technology

Table 24.2: A model for corporate governance

praxis, identifying values and norms, i.e. the axiological preferences of the agent. In a model for the business' autonomy, ethics can be considered self-referring. Strategy orients pragma, elaborating possible courses of action. It allows the actor to choose from different possibilities in light of their external utility. In a model for the business' autonomy, strategy can be considered to be self-propelling. Organization orders pragma, articulating, differentiating, combining and coordinating the effective means. This activity aims at efficiency, the realization of goals and the affirmation of values. In a model for the business' autonomy, organization can be considered self-organizing. Management orients poiesis, which along with rules, sets down, stimulates, realizes and checks specific actions in the realm of the action as a whole. Technology orders poiesis because it indicates a string of operations – very often a sequential string — that produce a wanted result.

In the following paragraphs we illustrate some possible applications of this model to management education. We mapped the DIKW (data-information-knowledge-wisdom) Pyramid with Aristotle's categories creating a three level model. This model is further developed into a Strategic Data-based Wisdom framework, taking into account also the dimensions of the agent. In the final part of the work, with the goal of making sense of data, we explore the 'upper' part of the DIKW Pyramid, creating a WIK Model for problem solving, that is 'mapped' onto the three levels and the two dimensions of the Strategic Data-based Wisdom

framework.

5 THE APPLICATION OF THE MODEL

5.1 Reformulating the DIKW hierarchy

A very well known model in management education is the DIKW model (Data, Information, Knowledge, Wisdom) — otherwise referred to as the hierarchy of cognition, as data moves to information on the back of its relationships, to knowledge on the understanding of patterns, and then to wisdom through the application of principle.

In its original expression the model implies that data can be generated with little human intervention. But to become information it must, by definition, be examined by humans, who can convert this information into tacit and explicit forms for knowledge to be created. This must often be done several times, and sometimes by different groups of humans, for wisdom to be achieved.

This model — often quoted, or used implicitly, in definitions of data, information and knowledge in the information management, information systems and knowledge management literatures — requires all the levels, since «... information is defined in terms of data, knowledge in terms of information, and wisdom in terms of knowledge»²⁵. But, as Liew²⁶ points out, such «circular definitions are logical fallacies»²⁷. Describing the interrelationships does not constitute a definition.

This is why many authors have criticized this model. For example Tuomi²⁸ argues that the data, information and knowledge hierarchy is actually inverse, observing that there cannot be information or data without previous knowledge to produce them. Knowledge must exist before information can be formulated and before data can be measured to form information. Knowledge is shaped by one's needs and one's initial stock of knowledge²⁹.

Other researchers also proposed extensions to the 'top half' of the hierarchy; Ackoff³⁰ includes understanding (and some use intelligence) as its own level before attaining wisdom, and Zeleny³¹ proposes enlightenment as the final stage beyond wisdom. Furthermore, Zeleny³² mapped the elements of the hierarchy to knowledge forms: know-nothing, know-what, know-how, and know-why.

In the following Table we propose a theoretical framework, reformulating the DIKW model with the use of Aristotelian categories concerning both the profiles of action (*praxis* and *poiesis*).

Profiles	DIKW Model	Forms	
Praxis	Wisdom	Know-why	
Pragma	Knowledge	Know-how	
1 rugmu	Information	Know-what	
Poiesis	Data	Knowing-nothing	

Table 24.3: DIKW model mapped with Aristotle's categories

5.2 Profiles

Praxis represents the height of the creation of purpose. Praxis controls actions by means of intermediary values and effects. Praxis responds to the demand for the purpose of an action and is the humanistic capacity to act in sight of an objective. Its primacy derives from an awareness that an action is or not correct, or even productive, when it has an unknown symbolic context. It is praxis that puts what is experienced into contact with the world. And it is here in this aspect of action where ideals, passions, dreams, desires and in the end needs are born. We act in praxis with ethical and political approaches and logics. Praxis allows the actor to have the possibility to determine his or her own objectives and values.

Pragma fills the gap between praxis and *poiesis*. It bridges the logic of goals, the logic of values, and the logic of the technical conventions of efficiency and effectiveness. Pragma takes into account the need to review the role of *poiesis*, which in the modern and post-modern technological revolution has sometimes been conceived as 'self-referring' and, therefore, meaningless.

Poiesis is not directed toward a goal, even if it can develop a project. It does not promote scenarios of meaning or of self-realization nor does it reveal the truth. *Poiesis* simply functions. The agent becomes determined in *poiesis* by outside forces shaped by their productive realizations.

5.3 A note on Pragma

In the *Nicomachean Ethics*, Aristotle starts off by assuming that every activity is provided meaning that is directed towards and objective. The distinction between *praxis* and *poiesis* occurs exactly at the point of differentiation between objectives. In *poiesis*, the aims are works or products beyond the activity. In praxis, the end is realized in the activity itself. Despite this dis-

tinction, plans retrace the quest for technical effectiveness that is tempered by prudence. For Aristotle, practical wisdom, *phronesis*, is prudence that deliberately acts for the good around good things³³.

Doing things well implies the capacity to discern the contents of action. *Phronesis*, as 'practical wisdom', makes it possible to judge the balance between the circumstances in situations by evaluating emotions and available information. However, it does not leave it to be overwhelmed by emotions, muddled by ambiguity or tricked by appearances. *Phronesis* does not judge by applying pre-constituted models but evaluate the pros and cons for the concrete situation. In strategic terms, practical wisdom typically chooses between several strategic actions by offering the best combination of threats and opportunities, with adequacy, fruitfulness, simplicity and coherence.

It is Aristotle's exploration of the distinction between *techné*, i.e. practical knowledge associated with craft and productive actions, and the more 'deviant' notion of *phronesis*³⁴, that helps us to get a better sense of what the latter might mean. While both *techné* and *phronesis* are 'practical' and deal with the world of affairs, the status of *phronesis* as a form of knowing/doing/disposition is by no means uncontroversial³⁵.

In this work we lean towards an interpretation that accentuates the difference as proffered by contemporary scholars as MacIntyre³⁶, Dunne³⁷ and Eikeland³⁸. Their starting point is Aristotle's clear assertion that *phronesis* can't be *techné* because 'doing' and 'making' are different kind of things. What defines *techné* and differentiates it from *phronesis* is the predominance of a calculative means-ends mentality that characterises a kind of «consequentialist theology»³⁹ — taught in so many schools of business, whereby alternative courses of action are evaluated in terms of expected consequences and strategies are implemented «with expected outcomes that appear attractive»⁴⁰. *Phronesis*, on the other hand, is something that characterises a *phronimos*, someone who knows how to live well⁴¹.

Dunne and Eikeland argue that whilst *technè* is the knowledge that guides the activity of making (*poiesis*), in which means and ends are distinguishable from one another, *phronesis* is the practical wisdom that guides praxis, such that the 'doing' that is carried out constitutes an end in itself. As Eikeland⁴² puts it: «*Poiesis* makes things, Praxis makes perfect». While *poiesis* is intimately linked to a means-ends orientation (*technè*), *praxis* issues from *phronesis* as action that contains both its means and its end.

This is why in our model, we distinguish, at the level of *pragma*, two sub-levels: one devoted to information, that — more ore less — represents the concept of *technè*, more oriented towards *poiesis*; one devoted to knowledge,

that 'inspires' praxis through phronesis.

	Profiles	DIKW Model
Praxis		Wisdom
Pragma	Phronesis: practical wisdom	Knowledge
	Technè: practical knowledge	Information
Poiesis		Data

Table 24.4: The structure of *pragma*

5.4 Strategic data-based widsom

The same model can be used to map the passages from Data to Wisdom, taking into account both the Aristotelian profiles of action and the dimensions of the agent (drawn from Kant's theories). In Table 5 we represent a model for Strategic Data-based Wisdom.

		Autos	Nomos
Praxis	Wisdom	Consent	Values
Pragma	Knowledge	Knowledge Engineering	Knowledge Management
1 ragiiiu	Information	Business Intelligence	Information Management
Poiesis	Data	Data System	Data Mining

Table 24.5: The Strategic Data-based Wisdom Model

Consent and Values, at the praxis level, are directly connected with the 'macro' level of management education⁴³. *Consent* is necessary to realize a vision that shapes a strategic project. The ability to obtain *consent* for pre-set political designs is a central problem for the relationship between companies and their social partners⁴⁴. *Value* is what is considered to be important, praiseworthy and relevant for the conscience. The definition of importance fluctuates according to the views of various doctrines. The concept of value

has many definitions and conceptions that emerge from the great lines of thought that uphold either forms of absolutism or relativism for values.

In our model for Strategic Data-Based Wisdom, at the level of pragma we find some more dimensions connected with the 'meso' level of management education⁴⁵:

- Knowledge Engineering (KE), as the discipline that involves integrating knowledge into computer systems in order to solve complex problems normally requiring a high level of human expertise;
- Knowledge Management (KM), i.e. the process of organizing data and capturing, developing, sharing, and effectively using organizational knowledge. It refers to a multi-disciplined approach to achieving organizational objectives by making the best use of knowledge;
- Business Intelligence (BI), i.e. the set of theories, methodologies, and technologies that transform raw data into meaningful and useful information for business purposes;
- Information Management (IM), i.e. the collection and management of information from one or more sources and the distribution of that information to one or more audiences.

At the level of *poiesis* we find dimensions connected with the 'micro' level of management education 46 :

- Data System (DS), consisting of the network of all communication channels used within an organization;
- *Data Mining* (DM), i.e. the automatic extraction of useful, often previously unknown information from large databases or data sets.

Very often we focus too much on the *poietic* level, discussing, for example, if the solution lies in the Cloud or in redefining data mining, on in crowdsourcing (people-focused solutions). We believe that, in order to move from Big Data to Big Wisdom, all four levels and both dimensions are necessary.

5.5 The WIK model of Problem solving

The explosion of social tools, techniques, and technologies, combined with ever decreasing costs of data storage, has created a mountain of data that is smothering the knowledge within.

It is important in knowledge management to reject the notion that the function of knowledge systems is to be a bucket for pure data. As Firestone and McElroy⁴⁷ pointed out, the «knowledge cycle» exists to solve problems

and the problems in turn structure the questions to be asked and the information model that is tentatively appropriate.

Karl Popper, to whom the authors are indebted, said that all life is problem solving. One might say that it represents a fundamental task of managers and that all management is problem solving.

In a previous model elaborated by Bennet & Bennet⁴⁸, four processes are illustrated that represent the way the organization transforms its capabilities into actions: creativity, problem solving, decision-making, and implementation. This is why we decided to apply our model to problem solving, taking into account the following six steps of problem solving: problem finding; problem posing; problem setting; problem analysis; problem solving; decision making.

The WIK model of Problem solving is represented in Table 6, taking into account both two dimensions of action (*praxis* and *pragma*) and the dimensions of the agent (*autos* and *nomos*).

		Autos	Nomos
Praxis	Wisdom	Problem finding	Decision making/taking
Pragma	Knowledge	Problem analysis	Problem solving
11081110	Information	Problem posing	Problem setting

Table 24.6: The WIK model of Problem solving

The main advantages of this model consist in simplifying and clarifying the structure of problem solving, since some issues are not seen as independent phases, but as different perspectives of an action at different stages of awareness. Wisdom represents beginning and the end of every human decision, from problem finding to decision making.

6 CONCLUSION

Philosophical techniques and approaches can help clarify and evaluate the aims and values of management education. Concepts commonly treated by philosophers increasingly figure in management debates; power, authority, rights, justice, virtues, citizenship, community, property, value, knowledge, rationality, dialogue, responsibility, passion, emotion etc.

If the purpose of management education is to provide a basis for appropriate individual and organizational actions and behavior, more researchers

and practitioners need to engage with the debate about the nature of individual and organizational wisdom.

As a matter of fact, wisdom is still an illusive and profound construct even if we exclude theoretical and transcending wisdom from examination. Nevertheless, practical wisdom with its multi-facet elements provides a plausible goal for all individuals and organizations alike that seek a brighter future and the greater good. Practical wisdom embraced practical problem solving of business, human, and social issues. Presuming that practical wisdom (*phronesis*) can be cultivated in individuals systematically and developed in organizations collectively, practical wisdom would offer nontrivial contributions to society as a whole.

NOTES

- 1. P. Inman, Economics students call for shakeup of the way their subject is taught, «Guardian», 4 May 2014. Url: www.theguardian.com/education/2014/may/04/economics-students-overhaul-subject-teaching [last visited on 02/01/2015].
- 2. C. Bachmann, C.R. Loza Adaui, A. Habisch, Why the question of practical wisdom should be asked in business schools: Towards a holistic approach to a renewal of management education. Humanistic Management Network, Research Paper No. 2460665, 2014.
- 3. D. Melé. D., *Ethics in management. Exploring the contribution of Mary Parker Follett.* IESE Working Paper n. 618, IESE Business School University of Navarra, Pamplona 2006.
- 4. M.P. Follett, *Dynamic Administration: The Collected Papers of Mary Parker Follett*, edited by H.C. Metcalf and L. Urwick, Garland Publishing, London 1940, p. 124.
- 5. Ibidem.
- 6. J.G. March, *A Scholar's Quest.* «Journal of Management Inquiry», 12/3 (2003), pp. 205–207.
- 7. Ivi, p. 205.
- 8. L. Ledoux, *Philosophy: Today's manager's best friend?*, «Philosophy of Management», 11/3(2012), pp. 11-26.
- 9. Ivi, p. 14.
- 10. A. Whiteley & J. Whiteley, *Core values and organizational change Theory and practice*, World Scientific Publishing, Singapore 2007.
- 11. G. Deleuze, F. Guattari, F., *What is Philosophy?*, Columbia University Press, New York 1994.
- 12. W. Küpers, The art of practical wisdom. Phenomenology of an embodied, wise 'inter-practice'in organisation and leadership, in W. Küpers & D. Pauleen, A Handbook of Practical Wisdom. Leadership, Organization and Integral Business Practice, Gower, London 2013.
- 13. Ivi, p. 24.
- 14. Ibidem.

- 15. R. de Borchgrave, *Le philosophe et le manager. Penser autrement le management.* de Boeck, Paris 2006.
- 16. G. Klempner, *Philosophy in the Business Arena*, «Philosophical Practice», 4/1 (2009), pp. 376-385.
- 17. Ivi, p. 379.
- 18. A. Valero & J.L. Lucas, *Política de empresa. El gobierno de la empresa de negocios.* Eunsa, Pamplona 1991, p. 28.
- 19. A. Argandoña, *Anthropological and ethical foundations of organization theory.* IESE Working Paper n. 707, IESE Business School University of Navarra, Pamplona 2007.
- 20. Ivi, p. 2.
- 21. W. Küpers, *Integral responsibility for a sustainable practice in organisations and management*, «Corporate Social Responsibility and Environmental Management Journal», 18 (2011), pp. 137-150.
- 22. W. Küpers & M. Statler, *Practically wise leadership: towards an integral understanding*, «Culture and Organization», 14/4 (2008), 379-400.
- 23. A.W. Wood, *Kant and the problem of human nature*, in B. Jacobs & P. Kain (eds.), *Essays on Kant's Anthropology*, Cambridge University Press, Cambridge 2003, pp. 38-59.
- 24. C. Ciappei, Strategia e valore d'impresa. Saggezza e metodo dell'agire imprenditoriale, FUP, Firenze 2005. C. Ciappei, Il realismo strategico nel governo d'impresa. Materiali per una pragmatica del valore. FUP, Firenze 2006.
- 25. J. Rowley, *The wisdom hierarchy: representations of the DIKW hierarchy*, «Journal of Information Science», 33/2 (2007), p. 163.
- 26. A. Liew, *Data*, *information*, *knowledge*, *and their interrelationships*, «Journal of Knowledge Management Practice», 7/2 (2007), pp. 1-10.
- 27. Ivi, p. 1.
- 28. I. Tuomi, Data is More Than Knowledge: Implications of the Reversed Hierarchy for Knowledge Management and Organizational Memory, in Proceedings of the Thirty-Second Hawaii International Conference on Systems Sciences, IEEE Computer Society Press, Los-Alamitos (CA) 1999.
- 29. Ibidem.
- 30. R.L. Ackoff, *From data to wisdom*, «Journal of Applied Systems Analysis», 16 (1989), 3-9.
- 31. M. Zeleny, *Management support systems: towards integrated knowledge management*, «Human Systems Management», 7/1 (1987), pp. 59-70
- 32. Ibidem.
- 33. Aristotle, *Nicomachean Ethics*, 6.5 (trans. by H. Rackham, Harvard University Press, Cambridge (MA) 1986).
- 34. J. Dunne, *Back to the rough ground: Practical judgment and the lure of technique*, University of Notre Dame Press, Notre Dame (IN) 1993, p. 245.
- 35. R. Chia, R. Holt, & L. Yuan, In praise of strategic indirection: Towards a non-instrumental understanding of phronèsis as practical wisdom, in M. Thompson & D. Bevan. (eds.), Wise Management in Organizational Complexity, Palgrave Macmillan, Houndmills, Basingstoke 2013, pp. 53-67.

- 36. A. MacIntyre, After virtue, University of Notre Dame, Notre Dame (IN) 1984.
- 37. J. Dunne, o.c.
- 38. O. Eikeland, *The ways of Aristotle: Aristotlean phronesis, Aristotlean philosophy of dialogue, and action research*, Peter Lang, Bern 2008.
- 39. J.G. March, o.c., p. 205.
- 40. Ibidem.
- 41. Dunne, o.c., p. 245.
- 42. Eikeland, o.c., p. 122.
- 43. C. Bachmann, C.R. Loza Adaui, A. Habisch, o.c., p. 11.
- 44. C. Ciappei, & F. Bianchini, L'intuizione imprenditoriale. L'irrazionalità limitata nella strategia d'impresa, Giappichelli Editore, Torino 1999.
- 45. C. Bachmann, C.R. Loza Adaui, A. Habisch, o.c. p. 11.
- 46. Ibidem.
- 47. J.M. Firestone & M.W. McElroy, *Key Issues in the New Knowledge Management*, Butterworth-Heinemann, Boston 2003.
- 48. A. Bennet & D. Bennet, *Organizational Survival in the New World: The Intelligent Complex Adaptive System*, Butterworth-Heinemann Boston 2004.
- $\ \, \odot$ 2015 Cristiano Ciappei & Maria Cinque & Forum. Supplement to Acta Philosophica



Quest'opera è distribuita con Licenza Creative Commons Attribuzione - Non commerciale - Non opere derivate 4.0 Internazionale.

Testo completo della licenza