

L. Magnani, D. Secchi, E. Bardone

Docility and “through doing”  
morality: An alternative  
approach to ethics

2006/8



UNIVERSITÀ DELL'INSUBRIA  
FACOLTÀ DI ECONOMIA

<http://eco.uninsubria.it>

In questi quaderni vengono pubblicati i lavori dei docenti della Facoltà di Economia dell'Università dell'Insubria. La pubblicazione di contributi di altri studiosi, che abbiano un rapporto didattico o scientifico stabile con la Facoltà, può essere proposta da un professore della Facoltà, dopo che il contributo sia stato discusso pubblicamente. Il nome del proponente è riportato in nota all'articolo. I punti di vista espressi nei quaderni della Facoltà di Economia riflettono unicamente le opinioni degli autori, e non rispecchiano necessariamente quelli della Facoltà di Economia dell'Università dell'Insubria.

These Working papers collect the work of the Faculty of Economics of the University of Insubria. The publication of work by other Authors can be proposed by a member of the Faculty, provided that the paper has been presented in public. The name of the proposer is reported in a footnote. The views expressed in the Working papers reflect the opinions of the Authors only, and not necessarily the ones of the Economics Faculty of the University of Insubria.

© Copyright L. Magnani, D. Secchi, E. Bardone  
Printed in Italy in July 2006  
Università degli Studi dell'Insubria  
Via Monte Generoso 71, 21100 Varese, Italy

All rights reserved. No part of this paper may be reproduced in any form without permission of the Author.

# Docility and “through doing” morality: An alternative approach to ethics<sup>#</sup>

*Lorenzo Magnani<sup>\*</sup>, Davide Secchi<sup>§</sup>, and Emanuele Bardone<sup>\*</sup>*

July 2006

## Abstract

In this paper, we aim at presenting the distributed morality approach as it can be described by the docility model of social interactions. The proposition “morality is a matter of social interaction” constitutes our starting point. We aim at pointing out the ways through which individuals create moral alternatives to a given situation. The paper is dedicated to presenting morality as something connected to human cognition. We introduce a “manipulative” way of thinking about morality, and we argue that it is “distributed” through things, animals, computers, and other human beings (section I); furthermore, the idea of a type of “through doing” morality comes up. Then, we find that this model supports an alternative view of the socio-economic system and, therefore, we suggest that the docility model (section II, as amended from Simon’s original model 1990; 1993), fits the case. The field of business ethics exempts useful insights from research on this issue. Recent studies on moral thinking and moral imagination seem to support this research project.

**Key-words:** cognition, distributed morality, docility, social interactions, socioeconomic system

## Introduction

Morality is a matter of social interaction. This appears to be an anti-Kantian statement, however this is not true. We state that moral thinking and behavior are connected to social interactions, since these interpersonal conditions provide the grounds for morality to emerge. From an anthropological angle, moral conditioning arises from basic social needs (Humphrey, 1976). Moreover, ethical theories belong to inter-individual interactions, so that the categorical imperative or that is to say, what we think of as eminently rational, is also linked to how, where, and when we experience our lives.

In this paper, we do not discuss the origin of the categorical imperative or of Kantian or Rawlsian ethics, although we consider this issue highly important. The assumption that “morality is a matter of social interaction” constitutes the main hypothesis of the article.

---

<sup>#</sup> La pubblicazione del lavoro è stata proposta dalla Dott.ssa Enrica Pavione.

<sup>\*</sup> Department of Philosophy, Computational Philosophy Laboratory, University of Pavia, P.zza Botta 2 – 27100 Pavia, Italy

<sup>§</sup> Faculty of Economics, University of Insubria, Via Monte Generoso 71 – 21100 Varese, Italy, Tel. and Fax +39 0382 304788, email: dsecchi@eco.uninsubria.it

We start from such a proposition aiming to point out the ways through which individuals create moral alternatives to a given situation. Thus the problem to be tackled here rests in understanding how individuals lean on the social context to build up moral concepts. Moreover, we need to specify what kind of links individuals create in their ordinary moral thought, and how we can say this as a social attitude.

The paper is dedicated to a new approach to morality that is strictly related to some hypotheses on human cognition. We introduce a “manipulative” way of thinking about morality, and we argue that it is “distributed” through things, animals, computers, and other human beings that can be found in the context in which individuals operate (section I). Once we have outlined a model of the distributed approach to morality, we find that this supports an alternative view of the socio-economic system. Therefore, we present (section II) a model of social interaction that supports the hypotheses we made on how cognition and morality work. We refer to the “docility” model, as amended from Simon’s original (1990; 1993).

We believe that these original approaches to morality and to how the social system works offer a very powerful tool for the understanding of human thinking and behavior. Moreover, we suggest that the field of business ethics could gain useful insights from investing in more research on the issue. Recent studies on moral thinking and moral imagination (above all, Werhane, 1999) provide concrete support for our idea.

### **Distributed morality and the role of moral mediators. An alternative approach to ethics**

In this section we will introduce an alternative perspective on morality, which is based on recent advancements in the area of distributed cognition. Following ideas put forward in Magnani’s recent work (2006c), we will illustrate how the capacity for seeing the world morally, and acting accordingly, heavily depends upon the external resources employed, more heavily in fact, than moral philosophers and ethicists previously thought. In the first part, we will describe how morality can be considered as a “through doing” activity. We will present a series of examples to clarify this point. In the second part, we will outline the notion of the moral mediator, introduced by Magnani (2005b), as a key concept in explaining this new perspective on ethics and morality.

#### *Morality as a “through doing” activity*

As a matter of fact, and following Simon’s (1947; 1955) arguments, we maintain that human beings are problem solvers. They are continuously engaged in solving problems all day long, every day. Some of them are more trivial, such as choosing the clothes to wear or buying a car. Others are much more complicated: for instance, choosing which university to attend, changing job, deciding whether to marry Suzie or John, whether to invest in a Chinese corporation, to fund a charity or support Greenpeace, etc. Some of these are labeled as moral problems, since they involve other people: their health and happiness and everything that concerns their life as human beings.

Ethical deliberation, and morality in general, can be considered as a problem solving activity in which people try to apply pre-existing solutions and/or generate new ones to complete the various tasks they face. However, as in any kind of problem solving activity, ethical deliberation is based on intrinsically incomplete information, because it

is impossible for anyone to be aware of every fact related to any given subject. That has important theoretical implications: 1) having incomplete information means that our deliberations and decisions are never the best possible answer, but they are at least satisficing; 2) our conclusions are always withdrawable (i.e. questionable, or never final). That is, once we get more information about a certain situation that involves some moral concern, we can always revise our previous decisions and think of alternative pathways that we could not “see” before; 3) a great part of our efforts in solving a moral task are devoted to elaborating conjectures or hypotheses in order to obtain more adequate information. Within this framework, conjecturing is essentially an act that permits us to manipulate our problem, and the representation we have of it, so that we may eventually acquire more “valuable” data. In this sense, we maintain that morality is manipulative in its essence, because it deals with changing and manipulating the world in order to overcome the unsatisfactory character of the options that are immediately available.

In generating conjectures and hypotheses, people also used to rely on external resources that helped their capacity to think of a problem in moral terms. Recent studies on the so-called “distributed cognition” approach have questioned some of the assumptions behind human cognition and the way it really works (Wilson, 1994, 2004; Hutchins, 1995; Clark and Chalmers, 1998; Kirsh, 1999; Donald, 2001; Clark, 2003; Magnani, 2006b, 2006c). In particular, it has been argued that human cognition cannot be regarded as something that happens only within the isolated brain (Wilson, 2004). As a matter of fact, people are limited and therefore they usually lean on external resources that can be of various kinds (Clark and Chalmers, 1998): a sheet of paper, a computer, a pen, and so on. External resources play a crucial role, and not only in accomplishing tasks that have a certain moral angle (Magnani, 2005a; 2005b; 2006c; Magnani and Bardone, 2006).

To clarify this point, consider the following case. Suppose that John has quarreled with a friend named Jane. John is very angry and thus he decides to write an email to Jane in which he expresses his profound irritation. Once finished, John re-reads the message he furiously jotted down, and then decides that it is too nasty to send to his friend. A “sending confirmation message” pops up and he decides not to send his email. What is the cognitive meaning of John’s decision?

In this case, John’s decision not to email Jane can be considered as a result of a manipulative activity that is mainly tacit and implicit, in which the role of the external resources (software, in this case) is crucial. The decision to write and then re-read allows him to manipulate his feelings and emotions so that new and previously unavailable information and reasons are successfully unearthed. New moral options and chances are thus created.

Now the question is: how could we take into account processes like this one, if we consider morality as a business that is related only to the application of rules, imperatives or guidelines? As the example shows, ethical deliberation and morality are expressed not only in words at a verbal/propositional level (Johnson, 1993) but also through model-based and “through doing” processes (Magnani, 2006c). This is the basic point we want to stress in this paper.

As mentioned above, people often exploit external supports (for example, language but also technological innovations) to enhance their moral efforts in a completely tacit fashion as the example tells us. We can distinguish two main different types of moral behavior employed by human beings. The first type is related to selecting the most

appropriate course of action from a library of pre-existing behavioral templates that can be considered as automatic responses. The second type regards all those situations in which humans do not rely on pre-existing solutions, but invent new ones. In the following section we will provide some examples of moral templates, and we will account for the creation of new ones.

Generally speaking, a moral template is a set of actions and decisions that have been successfully tried and tested within a society or culture. In this sense, it represents a variety of solutions that become culturally and socially accepted and that on occasion are deployed and thought to be the best course of action in certain circumstances. Some of these solutions are linguistically encoded in guidelines and imperatives. The Ten Commandments are an extraordinary example of moral templates, because they provide moral options and solutions that may help people in many circumstances. Moral theories themselves are examples of this kind, because they provide a highly theoretical guide to various aspects of everyday life. Utilitarianism, Kantianism, and the social contract are thus ways of interpreting the world in a moral sense that give us explicit, coherent, and consistent reasons for our actions (Thagard, 2000).

Many other templates are not explicitly laid out or expressed in a sentential way, but remain embodied in actions and bound up with various external structures and configurations. The case of the email we presented above is an example of this kind: writing is indeed an experienced and powerful template that can be used to reflect upon some complicated issue and/or to manage our emotions and feelings in order to assess whether they are appropriate or not (Harris, 2004; Love, 2004; Wheeler, 2004).

Another example of a moral template that is not sentential, but embodied in an external structure is represented by the various institutions that we find in many societies and cultures. The institution of the family is an example of this kind. The family can be considered as a template that groups various successful solutions to some problems related to survival, but also to parental care, children's education, the role of elderly people, property, the division of labor, and many other issues that can be the source of problems and conflict among human beings.

The nature of these templates is highly conjectural. As a part of problem-solving activities, their validity rests on the fact that they are successfully experienced and transferred to others as cultural inheritance. But they still remain retractable and open to improvement.

As noted above, sometimes pre-existing templates are not adequate to solve the problems that we face. As a matter of fact, templates themselves were once invented and created, because the options available at a certain moment were not adequate.

First of all, moral innovations sometimes represent a radical revolution compared to past templates. Let us consider the case of democracy. Democracy represented an amazing moral innovation, compared with pre-existing forms of government. It brought into existence a series of moral entities that were totally neglected before its advent. For instance, the notion of citizenship gives a moral and equal status to everyone, a classic example being: *liberté, égalité, fraternité!* In other terms, the radical moral (rather than social and political) innovation was that every citizen had been appointed with certain basic rights that the State could not take away. In this sense, the idea of democracy creates morally intelligible entities, e.g. the citizens. The moral status of human beings dramatically changed after the modern democratic State had been created, and things changed again when women were first allowed to vote. These are examples of how morality changes in history, and, with it, the objects that are given moral meaning.

Secondly, moral innovations may arise from pre-existing templates that are occasionally revised and modified. However, the process of revising old moral habits and concepts may be extremely problematic. Consider, for instance, the case of gay marriage. Its proponents attempt to solve some conflicts related to extending a set of rights also to gay couples by modifying the entire institution of the family. This issue can be highly controversial, because its opponents argue that the traditional family is a template that has been highly corroborated to solve certain problems, but not others. A precautionary principle is thus advocated. In some countries, the problem of gay marriage has been solved in a different way: Gay couples could contract any details of their relationships in the same way that any other unmarried couple could. In this case, a new and different moral option is created by modifying, but not replacing, a pre-existing template.

It is worth noting that not all moral inventions become widespread templates or solutions. Some of them can be occasionally employed by a lone person or a group, but soon discarded. That can be true, no matter if they were successful or not. First of all, because they can be immediately replaced by better ones. Secondly, because they cannot always be reproduced and/or transmitted. A new moral idea might be connected to a specific situation and context that cannot be replicated somewhere else. There are plenty of moral and social experiments that aimed at reconfiguring the entire western way of life. But some of them failed as general revolutionary movements, because they were strictly linked to a specific historical moment. Once social and political circumstances changed, their moral appeal soon disappeared.

Finally, the failure or the success of new moral ideas also depends upon society and human decisions. Collectivities can adopt and discard ideas and innovations for various reasons that can independently be social, political or economical.

All these examples we provided point to the conclusion that morality is a manipulative and “through doing” activity in its essence. It aims at manipulating and reconfiguring pre-existing ideas to solve some problem related to how to treat other human beings. As shown above, a great amount of our efforts are devoted to building various moral behavior templates that help us solve some specific problem. In doing this, the exploitation of external resources is crucial. Morality is fostered and enhanced by continuous moral delegations in which we transfer a large amount of ethical knowledge to various external and mediating structures, such as language, theories, institutions, technological artifacts, etc. In turn, what we have delegated to external structures (e.g. democracy, or democratic institutions, political representatives, pools, statistical services, etc.) could help us to generate new ideas: a re-projecting activity is thus carried out (Magnani, 2006b). It is a “re-projecting” activity because we introduce information each consecutive time, as it has been modified outside our brain. In this sense, individuals create new knowledge through the exploitation of external supports/resources. For we maintain that morality is a distributed phenomenon (Magnani, 2006c). That is, we cannot refer to morality as something that happens only within the human mind, but it is somehow distributed over a set of external resources and internal capabilities.

In order to detail these concepts, and to outline a new theoretical framework we illustrate in the next subsection the notion of moral mediator, first introduced by Magnani (2005a and 2005b).

#### *The notion of moral mediator*

Much of the behavior we conduct through learned habits – the tacit templates of action

described above – is devoted to building vast new sources of information and knowledge: external moral mediators. Generally speaking, moral mediators represent a kind of redistribution of the moral effort through managing objects and information in such a way that we can overcome the poverty and the unsatisfactory character of the moral options immediately represented or found internally.

In the example of the email, the software we use, for instance, Thunderbird, can be considered as a moral mediator, because it unearths additional information that is not available within our mind, and it helps us to overcome the paucity of internal moral options – principles and prototypes, etc. –available to us (Johnson, 1993). Indeed, other moral mediators are built by human collectives in a conscious way; this is the case with some objectified rules or principles created with a particular goal in mind or with long established ways of producing moral effects (religious rites, for example).

Using moral mediators is more than just a way to move the world toward desirable goals: it is an action that can play a moral role and therefore warrants moral consideration. We have said that when people do not have adequate information or lack the capacity to act morally upon the world, they can restructure their worlds in order to simplify and solve moral tasks. Moral mediators are also used to reveal latent constraints in the human-environment system, and these discoveries grant us precious new ethical information. Imagine, for instance, a wife whose work requires long hours away from her husband, and that her frequent absences cause conflict in the relationship. To improve their marriage, she restructures her life so that she can spend more quality time with her spouse, an action that can cause variables affected by “unexpected” and “positive” events in the relationship to co-vary with informative, sentimental, sexual, emotional, and, generally speaking, bodily variables. Before the couple adopted a reconfigured “social” order – that is, increased time together – there was no discernible link between these hidden and overt variables; a new arrangement has the power to reveal important new “information,” which, in our example, might come from a revitalized sex life, surprisingly similar emotional concerns, or a previously unrecognized intellectual like-mindedness.

A realigned social relationship is just one example of an external moral mediator; natural phenomena can also serve this purpose. In fact, many external things that have traditionally been considered morally inert can be transformed into moral mediators. For example, we can use animals, the earth, or cultural entities to identify previously unrecognized moral features of human beings, or we can employ external “tools” like writing, narrative, ritual, and institutions to reconfigure unsatisfactory social orders. Hence, not all moral tools are inside the head – many are shared and distributed in external objects and structures that function as objectified ethical devices.

While almost any sort of entity can help to mediate our moral outlook, certain technological artifacts can be considered über moral mediators – those equipped with artificial intelligence and the ability to be directly engaged in ethical reasoning and behavior. We must not only recognize the ethical ramifications of using such machines, but also of allowing them ethical autonomy toward human users as well as other devices; in the process, we must assuage human fears about machine intelligence (Anderson, Anderson, and Armen, 2005; Moor, 2005). Developing ways to deal with artificial intelligence is a new field of research – called “machine ethics” – that involves many interesting topics: improving interaction between artificial and natural intelligence systems by adding an ethical dimension to technological devices; using ethical strategies to enhance machine-to-machine communication and cooperation; developing



systems that provide expert ethical guidance; establishing decision-making procedures for ethical theories with multiple prima facie duties that present conflicting perspectives; and assessing the impact of machine ethics on society.

External moral mediators of all kinds can function as components of a memory system that crosses the boundary between person and environment. For example, they transform the tasks involved in simple manipulations that promote further moral inferences at the level of model-based abduction. In the above case of the wife seeking moral protection of her marriage, she transforms it by manipulating her behavior so as to increase the quality time spent with her husband, and thus finds new information that allows her to abduce/reach new internal model-based ideas and/or feelings – new motivating images, for example, or constructive emotions – about her husband and/or marriage. When the everyday life of a previously abused child is manipulated by placing her with a foster family, for instance, the new setting is a moral mediator that can help her abduce new model-based internal experience, images, emotions, or analogies through which she may be able to recalibrate her conceptions of adults, her past, and of abuse in general.

Actions executed through tacit templates can even enhance one's level of physical sensitivity: I can alter my bodily experience of pain by following the previously mentioned control of sense data template – that is, through unconsciously modifying the experience of my body and changing its relationships with humans or non-humans in distress, I may, for instance, create new, empathetic moral ways to help other human beings. Mother Theresa's personal moral feeling and consideration of pain was certainly shaped by her proximity to starving and miserable people and by her manipulation of both her and their own bodies. In many people, moral training is often related to this kind of spontaneous (and, sometimes, "lucky") manipulation of their own bodies and sense data that causes them to build (increase?) morality immediately and non-reflectively "through doing."

Throughout history, women have traditionally been thought to place more value on personal relationships than men do, and they are often regarded as more adept in situations requiring intimacy and caring. It would seem that women's basic moral orientation emphasizes taking care of both people and external things through personal and specific acts rather than by relating to others through an abstract, general concern for humanity. The ethics of care does not consider the abstract "obligation" to be as essential; moreover, it does not require that we impartially promote the interests of everyone alike. Rather, it focuses on small-scale relationships with people and external objects, so that, for example, it is not important to "think" of helping disadvantaged children all over the world (as men tend to aim at doing) but to "do" so in specific cases when called upon anywhere (Urban Walker, 1996: 276; Johns 2005).

The conception of morality "through doing" does not mean that this so-called female attitude, being more closely related to emotion, should be considered less deontological or less rational and therefore a lower form of moral expression. I contend that many of us can become more intuitive, loving parents and, in certain situations, learn to privilege the act of "taking care" of our children by educating our feelings – maybe by heeding "Kantian" rules (Carse, 1999). The route from reason to feeling (and, of course, from feeling to reason) is continuous in ethics. Many people are suspicious of moral emotional evaluations because emotions are vulnerable to personal and contextual attributes. Nevertheless, there are moral circumstances that require at least partially emotional evaluations, which become particularly useful when combined with

intellectual (Kantian) aspects of morality.

Consequently, “taking care” is an important way to look at people and objects, and, as a form of morality accomplished “through doing,” it achieves status as a fundamental kind of moral inference and knowledge. Respecting things like people is a natural extension of the ethics of care; a person who treats “non-human” household objects with solicitude, for example, is more likely to be seen as someone who will treat human beings in a similarly conscientious fashion. Consequently, using this cognitive concept, even a lowly kitchen utensil can be considered a moral mediator.

### **The social side of moral mediation**

Broadly speaking, anything can be thought of as a moral mediator. It depends on the cognitive meaning that individuals attribute to something outside their brain. However, how can we use these mediators? Is society, and/or social behavior a sort of moral mediator? In other terms, do we need to redefine social interactions? These issues are questioned here, since the aim of this section is to outline the way “through doing” morality, and moral reasoning in general is embedded in the social context.

#### *The point on individual cognition and morality*

Since Edgeworth (1881) many attempts have been made to restrict the economic field of studies to something measurable, or merely quantitative (Becker, 1974; Friedman, 1953; Friedman, and Savage, 1948), and explained through hedonistic models of economic behavior. The result has been the divide between ethical and economic fields of studies (Etzioni, 1988). Models of economic behavior have usually been thought of as being founded on self-interested individuals seeking utility maximization (Mas-Colell, Whinston, and Green, 1995; Etzioni, 1988; Frank, 1987, 1988; Sen, 1977). However, this is not the case for actual behavior, nor is it the case for the way rationality seems to work (Simon, 1947, 1955, 1979). The problem is that of defining human behavior and the environment in which individuals behave. Re-defining rationality, complicating economics, or including ethical, emotional, or political thinking, to the basic economic man, becomes a somehow traditional issue since many scholars wrote on it (Casson, 1995; Hirschman, 1970; Sen, 1987).

As argued and discussed in the last section, individuals lean on external supports which they store their knowledge in. External supports are of various kinds; for instance, sheets of paper, computers, but also other individuals, and inanimate objects such as pencils, bottles or any other thing to which we confer cognitive meaning. They help individuals in their cognitive performances, so that they are able to “play” with them in relation to their internal capabilities (Bardone, and Secchi, 2005, 2006).

This process, that we defined above, is composed of two essential parts. In fact, we can divide (a) the externalization process from (b) the re-projecting phase (Magnani, 2006b, 2006c; Bardone, and Secchi, 2006). The former is related to the way individuals confer meaning to situations, objects, people, and all external resources while the latter refers to information re-introduction, and ordinarily follows externalizations. In this part, we focus on the way individuals externalize cognitive competencies to things, animals, cyborgs, or individuals (Clark, 2003; Magnani, 2006c).

When we state that external things play both a cognitive and moral role in any decision-making process, we are arguing that the interaction between them and the individual

follow a sort of mediated process (Magnani, 2005b). These external things (we may call them, more technically, “resources”) play a role of mediators that uncover hidden information and moral views. In particular, we are interested in the moral mediation that actually occurs; and we presented and analyzed this issue in the first section of the article. External cognitive and moral resources carry information (or knowledge, in the case of humans) that are normally exploited by individuals. This exploitation opens a new radical approach to (cognition, and) ethics because it relies on the manipulation and “through doing” hypotheses. It is apparent that the act of manipulation defines an open-ended process, where individual morality (and cognition) is shaped by the interaction with external resources. Cognition is an ongoing process, and morality is but a part of this human activity.

The point that we now want to address relates to the type of moral mediation. We describe a real process or, that is to say, we aim at describing the way humans create new moral templates through everyday behavior (that is, through a kind of manipulation). Of course, one of the implications of this approach is that individuals need moral knowledge to behave successfully in many situations. Moral reasoning and behavior is something that varies, because it needs to fit a given situation, or to solve a concrete or speculative problem. This was our starting point, at the beginning of the first section. Do individuals develop “moral strategies”? Moreover, if so, what kind of “moral strategies” do they develop? Is there anything like a social moral mediator? Do we need anything like that in a social-organizational context? This is what we try to address in the next sub-section.

#### *A theory of docile society*

Ordinary theories of economic behavior normally do not address morality (Mas-Colell, Whinston, and Green, 1995) and, when this is the case, they do not point out the ways through which morality shapes individuals’ cognition (here used in the sense of rationality).

As we mentioned above, economic models present self-interested individuals aiming at maximizing their utility function. What happens if we suppose that individuals think and behave altruistically more than selfishly? And, what explains such a different economic system? Or, similarly, how about defining a model of social interaction where individuals are not merely selfish or altruist, but where these alternatives are defined through the “cognitive style” they adopt?

These questions may appear simplistic. Nevertheless, they underline a very crucial point because they refer to the core of social interaction. At the basis of social interaction, we may argue that, from a behavioral point of view, individuals act altruistically more than selfishly (Axelrod, 1984; Frank, 2004). There is no agreement on the way altruism is defined (Khalil, 2004; Lunt, 2004; Sesardic, 1995; Wilkinson, 2004); generally speaking, we refer to it as the act of giving something to someone, the altruist bearing the cost for behaving that way (Simon, 1993). So, altruistic behavior is not without its cost, but it involves some other kind of advantage for the altruist. When referring to “cost,” we do not necessarily mean that in economic terms, the altruist has to spend money, to sell something or to decrease her/his economic wealth. It might be something that involves time, emotional expenditure or moral engagement. For example, we may think of Mother Theresa helping people in Calcutta, and how she spent her time and became emotionally and morally involved. However, given her lifestyle, we cannot think of her as being at all concerned for her own economic wealth. Above all, she was

an altruistic individual. In summary, altruism is the self-deprivation of something that the altruist passes on to other individuals.

Is altruism a fundamental principle in our societies? Does it lie at the core of social interaction? Herbert Simon presented a model of altruistic behavior in his later works (1990; 1993). He suggested that individuals behaving altruistically fit the social and economic environment more successfully than selfish ones. The point is that the altruistic has a kind of moral concern toward society; they have a vision of their role in society, i.e. of their interplay with the other members of society. The altruist, in other terms, thinks about herself/himself as a social being, and realizes that society, and other people, matter in solving problems related to human lives (Secchi, 2005). Broadly speaking, this is the way we ordinarily think. This is the way we manage our lives. However, we think about “altruism” as something marginal to the problems of everyday life, and we normally match it to moral or emotional parenthesis in our lives. As scholars show using very simple algorithms (Simon, 1993; Knudsen, 2003; Secchi, 2005), the kind of “technical” altruism defined above is embedded in our way of behaving and thinking (see also Yung-An, and Day-Yang, 2003). We need to move a step further: what is the framework (or the “strategy” we mentioned above) that allows altruists to behave altruistically? Why do altruists have a social idea of human interactions?

The answer has been suggested, again, by Herbert Simon. Individuals behave pro-socially because they are “docile,” or they tend “to depend on suggestions, recommendations, persuasion, and information obtained through social channels as a major basis for choice” (Simon, 1993: 156). This is a way to define the pro-social behavior or “socializability” of individuals. However, what Simon points out in this definition is more than simply an argument that individuals develop pro-social attitudes, because he underlines that they depend on “social channels” in their decision-making processes. This is obviously a cognitive issue, and Simon’s docility is the “social side” of the general human tendency to lean on external resources (see above, and Bardone, and Secchi, 2005; Magnani, 2006a). In other terms, docility is a sort of mediator that can indeed be defined as moral, and allows individuals to develop knowledge about society and other human beings. However, we need to say more. Accordingly, docility can be also regarded as a sort of model-based social reasoning, since it guides and helps people in a variety of situations in developing, modifying and creating knowledge (for a definition of model-based reasoning, see Magnani, 2001; Magnani and Dossena, 2005). Again, the moral mediator is something that adds moral information and provides alternative viewpoints on a particular situation, problem, dilemma, etc. This supports human bounded moral rationality, since it develops new templates. The docility attitude is something that drives cognitive information, and thus moral knowledge, through social channels. In this sense, we can classify it as a moral mediator.

### *Implications*

Social interactions are based on information exchanges that the docility tendency sustains and develops. This statement allows us to underline some of the basic implications of this approach: (a) docility has both active and passive sides, (b) it passes through social channels and affects society overall, (c) the “others” perspective is the core of our social being, so that morality is in fact embedded in the way we think and behave.

Simon stresses the passive side of docility, when he states that it is the “tendency to

depend” on social channels. Moreover, we can say that the word itself – docility – calls for something that is somehow passive. Though, if we think of social interactions in general, we may well define both active and passive flows of information. It is true, on the one hand, that we depend on variables “obtained through social channels” and, on the other hand, that we provide information, suggestions, and the like through these social channels (Bardone, and Secchi, 2006; Secchi, 2005). From this angle, docility is a “mediator” in the sense that it defines the general tendency to think of social channels as being part of our way of obtaining and providing information. It is worth noting that, in many cases, the only way to obtain information is to “manipulate” these social channels, i.e. to provide information at the same time. Providing information is a way to change the environment, and to wait for something different to happen. The information process is a two-way task. Think of a conversation, a company that publishes its financial or social report, a crying baby, and a marketing manager that shows research results in a table to her/his staff: these processes, and many others, are two-sided, i.e. they intend to provide information in order to gather new feedback information, thereby obtaining a different cognitive perspective on the issue. Thus, docility is the “medium” through which individuals exchange information using social channels. The point here is not to question where, or how, social becomes moral and vice-versa, but to underline the fact that we do ordinarily manipulate economic, social, and moral issues/problems through the docility channel.

The second implication relates to the way docility increases its power in society overall. We move a step back to the point we started from. We write that altruism is the basic tendency of individual behavior, in the sense that altruistic individuals encounter a “social vision” more often than selfish ones. This perspective allows us to say that true altruistic behavior does not discriminate toward the person receiving the altruistic action, and operates regardless of whether the recipient is selfish or altruistic. This is because altruistic behavior is motivated by other hypotheses that are based on a broader vision of society. This implies that altruistic action passes onto other individuals that may or may not reciprocate (on distinctions between direct and indirect reciprocity, see the interesting Tullberg, 2004). However, the point here is not whether individuals reciprocate or not, but the fact that this “social vision” provides its perpetrators with a greater “fitness”, i.e. they fit a social context more successfully than selfish individuals. As we have learned, “social vision” is but an aspect of what we called the “docility” attitude, and we may call the increasing tendency to lean on external social channels the “docility effect” (Secchi, 2005; Bardone, and Secchi, 2006). Broadly speaking, this “effect” is the way individual attitudes become evident and useful at a social level, thus “docility” tends to be a mediator for every member of the social system.

Finally, the third implication relates to the “others” perspective, and its moral meaning. This is the core of the docility argument, because we are stating that everything we learn, think, do, create, or provide (we might say, “externalize”) belongs to the tendency to exploit social channels, i.e. other individuals, in this case. One of the main contributions of this perspective is that it underlines that individuals “manipulate” their own and other people’s information. This action has some moral implications. Regardless of whether it is a Kantian, utilitarian, hedonistic, or Hobbesian ethical perspective that we want to apply to the specific case, individuals need to fit the social context. They modify their original moral sentiment in order to provide a solution to the problem they are facing. How do they do it? They use their tendency to rely on social channels to reach a better evaluation of the variables involved and to find a better

solution. In other terms, they use docility mediation. Since this is an ongoing process, docility favors the emergence of “through doing” morality.

## **Conclusions**

The assumption that individuals are docile helps us understanding many of their characteristics. The simple proposition that a human maintains pro-social attitudes doesn't define anything more than a general approach toward individual interactions. However, the docility perspective adds something more to this general approach, since it bases human behavior, and cognitive processes, on this social attitude.

We have seen that “being docile” means providing and obtaining information, suggestions, comments, and the like from social channels. In addition, docility is a fundamental attribute for decision-making and problem solving activities, because it mobilizes different kinds of information. Individuals are set for receiving information through social channels, and they also manipulate, as we described above, these social channels through interactive modifications. In other terms, they acquire more knowledge through the interaction of social channels. This is exactly what we mean with the words “through doing.” What's new about this approach?

We note and can affirm for the first time, that docility is a mediating concept because it helps in connecting pro-social behavior to the cognitive mechanisms. Moreover, in doing so we can also define the variables through which morality is not static, nor defined a priori, when speaking of individual behavior. We found that moral thinking is part of a more general cognitive process, that we defined in two phases – externalization and re-projecting – where docility mediates moral meanings and helps people change their position.

The activity of mediation can be analyzed in relation to the variables that constitute the docility effect. For example, how can we define social channels? Can we make a weighted influence of social channels influencing individual behavior? Can we define different kind of moral mediations that originate from docile individuals? Can docility become “structured” in social organizations? Does it mean that moral thinking is connected to the social organization considered? How can we define the role that individual representations of moral mediators have in choosing the social channels through which to conduct explicit docile behavior?

These and many other questions are currently being addressed in our ongoing research (citations concealed to maintain anonymity). Ideas for future research are studying how these variables affect moral decision-making and problem solving activities from both theoretic and empirical angles and of merging the two traditions of economic modeling and the model-based reasoning approach to cognition, focusing upon morality.

## References

- Anderson, M., Anderson, S.L., and Armen, C. (eds.) 2005. *Machine ethics Papers from the AAAI Fall Symposium, Technical Report FS-05-06*, p. 78. Menlo Park (Ca.): AAAI Press.
- Axelrod, R. 1984. *The evolution of cooperation*. New York: Basic Books.
- Bardone, E., and Secchi, D. 2005. Extending the bounded rationality model. The distributed cognition approach. *Working paper*, 9, Department of Economics. Varese: University of Insubria.
- Bardone, E., and Secchi, D. 2006. The distributed cognition approach to rationality: Getting the framework. Unpublished paper.
- Becker, G.S. 1974. A theory of social interactions. *Journal of Political Economy*, 82(6): 1063-1093.
- Carse, A.L. 1999. Facing up to moral perils: the virtue of care in bioethics. In: H.J. Robinson, R.M. Berry, and K. McDonnell (eds.). Robinson, H.J., Berry, R.M., and McDonnell, K. (eds). *A health law reader. An interdisciplinary approach*, pp. 51-59. Durham, NC: Carolina Academic Press.
- Casson, M. 1995. *Entrepreneurship and business culture. Studies in the economics of trust*. Aldershot (UK) and Brookfield (US): Edward Elgar.
- Clark A., & Chalmers, D.J. 1998. The extended mind. *Analysis*, 58: 10-23.
- Clark, A. 2003. *Natural-born cyborgs: Minds, technologies, and the future of human intelligence*. Oxford: Oxford University Press.
- Donald, M. 2001. *A mind so rare. The evolution of human consciousness*. London: Norton.
- Edgeworth, F.Y. 1881. *Mathematical psychics. An essay on the application of mathematics to the moral sciences*. London: C. Kegan Paul & Co.
- Etzioni, A. 1988. *The moral dimension. Toward a new economics*. New York: The Free Press.
- Frank, R.H. 1987. Shrewdly irrational. *Sociological Forum*, 2(1): 21-41.
- Frank, R.H. 1988. *Passions within reason*. New York: W.W. Norton.
- Frank, R.H. 2004. *What price the moral high ground? Ethical dilemmas in competitive environments*. Princeton and Oxford: Princeton University Press
- Friedman, M. 1953. *Essays in positive economics*. Chicago: The University of Chicago Press.
- Friedman, M., and Savage, L.J. 1948. The utility analysis of choices involving risk. *Journal of Political Economy*, 56(4): 279-304.
- Harris, R. 2004. Integrationism, language, mind and world. *Language Sciences*, 26: 727-739.
- Hirschman, A.O. 1970. *Exit, voice, and loyalty. Responses to decline in firms, organizations, and states*. Boston: Harvard University Press.
- Humphrey, N.K. 1976. The social function of intellect. In Bateson, P.P.G., and Hinde, R.A., *Growing points in ethology*, pp. 303-317. Cambridge: Cambridge University Press.
- Hutchins, E. 1995. *Cognition in the wild*. Cambridge (Mass.): MIT Press.
- Johns, C. 2005. Reflection on the relationship between technology and caring. *Nursing in Critical Care*, 10(3):150-155.
- Johnson, M. 1993. *Moral imagination*. Chicago: Chicago University Press.
- Khalil, E.L. 2004. What is altruism? *Journal of Economic Psychology*, 25: 97-123.
- Kirsh, D. 1999. Distributed cognition, coordination and environment design.

- Proceedings of the European Conference on Cognitive Science*, pp.1-10.
- Knudsen, T. 2003. Simon's selection theory: Why docility evolves to breed successful altruism." *Journal of Economic Psychology*, 24: 229-244.
- Love, N. 2004. Cognition and the language myth. *Language Sciences*, 26: 525-544.
- Lunt, P. 2004. Questions of definition scope in economic theories of altruism: A commentary on 'What is altruism?' by Elias Khalil. *Journal of Economic Psychology*, 25: 135-139.
- Magnani, L. 2001. *Abduction, reason, and science. Processes of discovery and explanation*. New York: Kluwer.
- Magnani, L. 2005a. Technological artifacts as moral carriers and mediators. In: M. Anderson, S. Anderson, and C. Armen (eds.), *Machine Ethics, Papers from AAAI Fall Symposium Technical Report FS-05-06*, pp. 62-69. Menlo Park (Ca.): AAAI Press.
- Magnani, L. 2005b. Moral mediators. How technology makes us moral. In: L. Magnani and R. Dossena (eds.). *Computing, philosophy, and cognition*, pp. 21-36. London: King's College Publications.
- Magnani, L. 2006a. The mediating effect of material cultures as human hybridization. In: S. Hongladarom, and C. Ess (eds.), *Information technology ethics, cultural perspectives*. Hershey (Pa.): Idea Group Inc.
- Magnani, L. 2006b. Mimetic minds. Meaning formation through epistemic mediators and external representations. In: A. Loula, R. Gudwin, and J. Queiroz (eds.). *Artificial cognition systems*. Hershey (Pa.): Idea Group Publishers.
- Magnani, L. 2006c. *Knowledge as a duty. Distributed morality in a technological world*. Cambridge: Cambridge University Press (forthcoming).
- Magnani, L., and Bardone, E., 2006. The Internet as a moral mediator. The quest for democracy. In: G. Crnkovic (ed.). *Proceedings of the International European Conference Computing and Philosophy (E-CAP2005)*, forthcoming.
- Magnani, L., and Dossena, R. (eds.). *Computing, philosophy, and cognition*. London: King's College Publications.
- Mas-Colell, A., Whinston, M.D., and Green, J.R. 1995. *Microeconomic theory*. Oxford: Oxford University Press.
- Moor, J.H. 2005. The nature and importance of Machine Ethics. In: Anderson, M., Anderson, S.L., and Armen, C. (eds.). *Machine ethics Papers from the AAAI Fall Symposium, Technical Report FS-05-06*, p. 78. Menlo Park (Ca.): AAAI Press.
- Secchi, D. 2005. "Altruism and selfish behavior: The docility model revisited. *Working paper*, 8, Department of Economics. Varese: University of Insubria.
- Sen, A. 1977. Rational fools: A critique of the behavioral foundations of economic theory. *Philosophy and Public Affairs*, 6(4): 317-344.
- Sen, A. 1987. *On ethics and economics*. Cambridge: Basil Blackwell.
- Sesardic, N. 1995. Recent work on human altruism and evolution. *Ethics*, 106(1): 128-157.
- Simon, H.A. 1947. *Administrative behavior*. New York: The Free Press.
- Simon, H.A. 1955. A behavioral model of rational choice. *Quarterly Journal of Economics*, 69(1): 99-118.
- Simon, H.A. 1979. Rational decision making in business organizations. *The American Economic Review*, 69(4): 493-513.
- Simon, H.A. 1990. A mechanism for social selection and successful altruism. *Science*, 250(4988): 1665-1668.



- Simon, H.A. 1993. Altruism and economics. *The American Economic Review*, 83(2): 156-161.
- Thagard, P. 2000. *Coherence in thought and in action*. Cambridge (Mass.): MIT Press.
- Tullberg, J. 2004. On indirect reciprocity. The distinction between reciprocity and altruism, and a comment on suicide terrorism. *American Journal of Economics and Sociology*, 63(5): 1194-1212.
- Urban Walker, M. 1996. Feminist skepticism, authority and transparency. In W. Sinnott-Armstrong and M. Timmons (eds.). *Moral knowledge? New readings in moral epistemology*, pp. 267-292. Oxford: Oxford University Press.
- Werhane, P.H. 1999. *Moral imagination and management decision-making*. Oxford: Oxford University Press.
- Wheeler, M. 2004. Is language the ultimate artefact? *Language Sciences*, 26: 693-715.
- Wilkinson, G.S. 2004. A reply to Elias Khalil's 'What is altruism?' *Journal of Economic Psychology*, 25: 125-127.
- Wilson, R.A. 1994. Wide computationalism. *Mind*, 103(411): 351-372.
- Wilson, R.A. 2004. *Boundaries of the mind*. Cambridge: Cambridge University Press.
- Yung-An, H., and Day-Yang, L. 2003. "Altruism versus egoism in human behavior of mixed motives. An experimental study." *American Journal of Economics and Sociology*, 62(4): 677-705.