



**HAL**  
open science

# Environmental compensations and the problem of ”constitutive incommensurability”: a sociological analysis.

Laura Centemeri

► **To cite this version:**

Laura Centemeri. Environmental compensations and the problem of ”constitutive incommensurability”: a sociological analysis.. 2013. hal-01053286

**HAL Id: hal-01053286**

**<https://hal.science/hal-01053286>**

Preprint submitted on 30 Jul 2014

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# **Environmental compensations and the problem of “constitutive incommensurability”: a sociological analysis.**

Laura Centemeri<sup>1</sup>

<sup>1</sup>LAMES (CNRS/AMU)

**Abstract.** The aim of the paper is to discuss environmental compensations from the perspective of the pragmatic sociology of valuation. I use valuation to point to the social process of attribution of value, in this case the attribution of value to an environment. Value should not be intended exclusively as economic value but as any form of attribution of worth and importance to the environment. If an environment is valued, this means that it matters to us. And the ways in which an environment can matter to us are radically plural. The existence in our societies of a plurality of modes of valuation of the environment can account for different kinds of problems of incommensurability we are confronted to when deciding on the compensability of an environmental loss. In particular, when the environment is valued as a place of personal attachments –on the basis of a “familiar engagement” with the environment– this gives rise to a form of radical (or “constitutive”) incommensurability, which implies the refusal to consider a certain environment as equivalent to others. Through the case-study of the opposition to the expansion of the Malpensa airport in Milan, I will show how, when contesting the legitimacy of compensations, social actors can rely on “environmental goods of proximity” to challenge the legitimacy of the equivalences implied by compensation measures and, more generally, to challenge the higher general interest justifying the sacrifice of environmental goods.

## **1 Introduction**

The term environmental or ecological compensations (or offsets) points to environmental measures that are meant to counterbalance the negative impacts on an environment caused by plans or projects meant to support economic development. The aim of the paper is to discuss environmental compensations from the perspective of the *pragmatic sociology of valuation*.<sup>1</sup> I use *valuation* to point to the social process of

---

<sup>1</sup> For a general presentation and discussion of pragmatic sociology see Bénéatouil (1999), Dodier (1993), Silber (2003), Wagner (1999) and the special issue of the *European Journal of Social Theory* edited by Blokker (2011). For a review of North American and European research on sociology of valuation and evaluation, to which French pragmatic sociology has given

attribution of value, in this case the attribution of value to *an environment*. Value should not be intended exclusively as economic value but as any form of attribution of worth and importance to the environment. If an environment is valued, this means that it matters to us. And the ways in which an environment can matter to us are radically plural.

I argue that the study of how we value the environment – or conversely, how the environment matters to us – is crucial to provide us with a more complete understanding of the actual possibility to compensate for the loss of nature. This possibility of compensation should not be exclusively investigated as a scientific problem, that is, as a problem related to purely ecological dimensions. Other values, than the ecological one, have to be taken into account as well, if we want to understand what accounts for the social acceptability of environmental compensations as an appropriate way to deal with the negative environmental impacts provoked by plans and projects meant to support economic development.

From the vantage point of pragmatic sociology, it is possible better to understand conflicts concerning the acceptability of compensations as conflicts that originate from the pluralism of modes (or registers) of valuation of the environment existing in our societies (Lafaye and Thévenot, 1993; Lafaye, Moody and Thévenot, 2000).

Environmental compensations are thus revealed as complex social objects once they are intended as measures aiming at replacing lost environmental values or as measures meant to support the acceptability of a local environmental “sacrifice” in the name of a higher general interest. What are the relevant values lost because of the environmental impacts and to what extent they can be replaced; what makes the sacrifice of environmental values acceptable: these are not merely technical or scientific issues but social and political problems. *Environmental compensations are the case for conflicts of environmental valuation*: that is why I propose in this paper a frame to sociologically understand these conflicts. .

Environmental compensations imply to establish an equivalence between the environmental values which are lost and the environmental values which are created and that are meant as compensation. This implies that environmental compensations rely on some notion of

---

an important contribution, see Lamont (2012).

*commensurability* and commensurability is a social and political process (Desrosières, 1990; 1992; Espeland and Stevens, 1998). To establish an equivalence means to consider as expression of the same value things which are not the same: in this sense, commensuration is a political act since it makes us look at different things as being the same, thus changing our way to frame and make sense of the world around us (Desrosières, 1998).

Refusing environmental compensations as unacceptable often implies to claim for the *incommensurability* of the negatively impacted environment. As I am going to discuss, the existence in our societies of a plurality of modes of valuation of the environment can account for different kinds of problems of incommensurability we are confronted to when deciding on the compensability of an environmental loss. In particular, when the environment is valued as a place of personal attachments –on the basis of a “familiar engagement” with the environment- this gives rise to a form of radical (or “constitutive”) incommensurability, which implies the refusal to consider a certain environment as equivalent to others. “Constitutive incommensurability” (Raz, 1986) implies a mode of engagement with the environment, based on familiarity, which constitutes this environment as a spatial-temporal unique (O’Neill et al., 2008: 74): this process brings to the creation of what I will call *environmental goods of proximity*. Through the case-study of the opposition to the expansion of the Malpensa airport in Milan, I will show how, when contesting the legitimacy of compensations, social actors can rely on these environmental goods of proximity to challenge the legitimacy of the equivalences implied by compensation measures and, more generally, to challenge the higher general interest justifying the sacrifice of environmental goods.

## **2 Understanding commensurability (and incommensurability) in environmental valuation as a social process**

Incommensurability is a key-concept of the critique addressed by ecological economics to the neoclassical economic understanding of problems of environmental valuation.<sup>2</sup> In standard environmental

---

<sup>2</sup> See Spash (1999), Martinez-Alier (2002) and Gowdy and Erickson (2005) for a detailed discussion of ecological economics as a “heterodox” approach opposed to the mainstream neoclassical perspective of environmental

economics, “environmental valuation” is a matter of putting a (market) price on the environment. The virtue of pricing environmental goods and functions is to allow *commensuration* between alternative options or courses of action. According to the utilitarian approach, which provides the theoretical basis of this mainstream economic approach, commensuration is a prerequisite for rational decisions.

In contrast, many of the economists joining ecological economics reframe environmental valuation as an “open social process” to which problems of value incommensurability are unavoidable. Value incommensurability – i.e. the existence of plural ways to value the environment not reducible to a single common standard of valuation – is presented as “a foundation stone for ecological economics” (Martinez-Alier, O’Neill and Munda, 1998).

In reframing environmental valuation as a social process, ecological economists rely upon the philosophical critique of the generalised commensurability implied by utilitarianism. According to this critique, incommensurability is unavoidable since the goods a human being pursues in life so as to flourish are radically plural.<sup>3</sup> More specifically, vis-à-vis the generalised possibility of trade-off assumed in the utilitarian tradition, the concept of “constitutive incommensurabilities” (Raz, 1986: 345-353) has been coined to point to certain social relations and evaluative commitments whose existence implies a refusal to trade them off: love and friendship are usually invoked as examples of such social relations, as well as certain modes of attachment to the environment (O’Neill *et al.*, 2008: 79; Espeland, 1994).

The idea that valuation is a “social process” to which incommensurability is key since environmental values are plural has become very popular in ecological economics literature. However, we can detect some sociological blind spots in the way in which

---

economics. On the limits of the market approach to environmental issues see in particular O’Neill (2007).

<sup>3</sup> The philosophical debate on value incommensurability was particularly lively at the end of the 1990’s. See in particular the contributions in the book edited by Chang (1997) and in the special issue of the *University of Pennsylvania Law Review* edited by Adler (1998). As remarked by D’Agostino (2003), the philosophical debate has largely ignored the important sociological discussions on commensuration as a social phenomenon.

environmental valuation is addressed as a social process in this debate.<sup>4</sup> First of all, “values” are used as a sort of “black box” to point to alternative, non-economic, definitions of the valuable (meaning not based on prices) without explaining why some of these definitions appear as more legitimate than others in the space of deliberation. Moreover, it is not clear in what terms “constitutive incommensurability” represents a specific challenge to deliberation.

In order to understand conflicts between different languages and practices of valuation of the environment is thus necessary first of all to define in what terms economic valuation is related to others non economic forms of valuation. Second it is necessary to explore the specific “grammar” of valuation on which public deliberation relies in our modern societies. However, in order to answer these questions, we need first of all to specify in what terms conflicting languages and practices of valuation differ.

### **3 Explaining languages and practices of valuation through regimes of engagement**

In a similar move to the one promoted by Dewey’s pragmatism (Bidet, Quéré and Truc, 2011; Vatin, 2013), the variety of modes of valuation is considered in pragmatic sociology as related to the very same dynamic explaining the variety observable in human action. Valuation is in fact understood as the result of an evaluative judgment through which agents frame a given situation in order to carry out “the appropriate action” (Thévenot, 1990; Boltanski and Thévenot: 2006: 349). This judgement orients their ways to establish a relationship (that is, to engage and to coordinate) with the surrounding environment and results in attributions of value to human and non human beings. Action is thus understood in pragmatic sociology as *engagement* and *coordination* with the environment: coordination is possible if actors share the same evaluative judgment on the situation, which implies to share the same mode of engaging with human and non human beings involved in the situation and to value them.

---

<sup>4</sup> Sociologists have largely ignored this debate, which is situated at the frontier between economic sociology and environmental sociology. Moreover the renewed interest of economic sociologists for valuation is quite recent, the same being true for environmental issues.

The judgement of “appropriateness” of the action to a given situation is considered as crucial to the understanding of human action and it implies an *evaluative moment* in its unfolding. This evaluation is based on the *good* that the agent can aim at through coordination with the social and material environment. Three types of good are referred to in pragmatic sociology as generally recognised to guide human action: the “ease” of the accommodation with a familiar and appropriated environment; the good of the fulfilment of a planned action; the “common good” beneficial to the polity as a whole (Thévenot, 1990; 2001; 2006; 2007).<sup>5</sup>

On this basis, three main registers or modes of action - called “regimes of engagement” - are identified: the *familiar regime*, the *regime in a plan* (or normal regime of action) and the *public justification regime* (Boltanski and Thévenot, 2006; Thévenot, 2007).<sup>6</sup>

The public justification regime of action has been the most extensively explored and discussed. It defines a mode of action and valuation which is required by an agent in order to assure the largest possible coordination - a “public” coordination - open potentially to every human being. In fact, according to Boltanski and Thévenot the “justifiable action” and its specific mode of valuation are the cornerstone of the modern construction of the “public sphere” as a distinct sphere of social life. The construction of the public sphere goes with the definition of a specific mode of engagement and valuation of the surrounding human and material environment which is required to agents. In the way the public sphere has been historically built, the engagement required to agents is based on the qualification of human and non human beings according to their being worthy in terms of a

---

<sup>5</sup> By “common good” Boltanski and Thévenot (2006) refer to a political and historical construction, that of a principle of evaluation endowed with universality and intended to organise the polity as an ordered equilibrium oriented toward justice.

<sup>6</sup> “Regimes of engagement” are descriptive models of action. They are not the reconstruction of social reality and of its objective structures, nor are they predictive models of phenomena or behaviours. These models look to clearly define the competences and resources to which each actor should have recourse in order to produce a certain type of coordination with the social and material environment within a given context. Each model of action thus has its own corresponding “grammar”: this is the sense in which one can speak of “regimes” (Boltanski, 1990; Thévenot, 1990).

legitimate definition of the common good. Consequently, legitimate attributions of value are those establishing an order (of people and things in the situation) that is fair and just, since it respects their worth evaluated from the standpoint of the common good.

The fairness and justice of these attributions of value are proved through appropriate “tests of reality”. In the course of action, agents test the appropriateness of their evaluation having recourse to specific objects and instruments expressly conceived or formatted to assess value, or to more or less formalized valuation practices involving the material surroundings. In the public regime of action, tests of reality are performed through instruments and equipments that *objectively* assess the *worth* through the establishment of a “space of equivalence” based on the common good as the evaluative standpoint (Boltanski and Thévenot, 2006: 133-138). Consequently, commensuration is the operation which is at the heart of the reality tests meant to assess the legitimacy of a public attribution of worth.

The authors point out a specific feature of our modern society which accounts for its complexity: different definitions of the worth of people and things are equally held as publicly legitimate. In fact, plural specifications of the *common good* have emerged historically. This implies that plural legitimate “orders of worth” are possible in our societies.<sup>7</sup> In their research on practical modes of justification, Boltanski and Thévenot detect six different expressions of the common good in our society, defining as many justifiable social and economic general orders with their corresponding modes of valuation: *market competition, industrial efficiency, fame, civic solidarity, domestic trust, inspiration*.<sup>8</sup> The results is that in our societies plural legitimate logics

---

<sup>7</sup> The increasing importance of modes of valuation implying quantification in order to commensurate has been explored in sociology, since the beginnings of the discipline, as a social process crucial to the construction of capitalism. A relevant contribution that sociology brings to the mostly philosophical debate on commensuration is precisely to stress the importance of the historical and practical dimension of commensuration “as a social process” (Espeland and Stevens, 1998). In order to commensurate, we actively intervene in the world around us so as to make the cognitive exercise of equivalence easier: we format the environment around us, we build instruments or we define indicators and procedures to assure commensuration.

<sup>8</sup> Orders of worth are thus based on conceptual constructions of the common good that have historically emerged (Thévenot, 2011). That is why orders of



of commensuration are possible to establish an order according to the value (or worth) of the beings involved in the situation.<sup>9</sup>

Compared to the justifiable action, the “normal action” and the “familiar engagement” point to modes of coordination and valuation whose extension and public legitimacy are more limited. They are restricted respectively to those having a stake (an interest) in the action and to those being familiar with the environment. Consequently, moving from the normal action to the familiarity regime, the reality tests through which agents check on the appropriateness of their evaluation of the situation are progressively less dependent on a general standard assessing functions and needs and more embedded in a knowledge produced and shared through a personalised practice.

Reading action through this plurality of modes of engagement, pragmatic sociology brings us to consider the human agent as plural in her ways to be an “agent-in-the-environment”. The same person is capable of different kinds of agency - understood as diverse kinds of capacity to act – which are sustained by different ways of engaging with the environment and to value it: the *personality* with attachments in the familiar engagement, the *individual* with autonomy and interests in the normal action, the *person acting for the common good* in the justification regime. Accordingly, the surrounding environment is cognitively framed by agents as *familiar environment*, *functional objects*, or *conventional entities*. This means that according to the mode of engagement with the environment, the relevant information for testing the appropriateness of action is not the same: *perceptual clues* in

---

worth are not limited to six and new orders can always emerge, as shown by the work of Boltanski and Chiapello (2005) on the network-based worth of contemporary capitalism and by the emerging “green” order of worth discussed by Lafaye and Thévenot (1993). It is important to notice that these orders of worth do not overlap precisely with “spheres” of social activity. This is the main difference between this approach and Michael Walzer’s theory of spheres of justice. As I am going to argue, social situations are always marked by the simultaneous presence of multiple logics of order that could potentially be applied.

<sup>9</sup> Commensurating is thus not necessarily monetising. Money is historically the most relevant tool assuring commensuration in our societies but we can commensurate without necessarily using money and yet the logics of commensurate through money are plural.

the familiar regime, *ordinary language* of functions and needs in the normal action, *codified language* in the public action.

Each regime points to a “practical grammar” of valuation: valuation is based on legitimate *conventions* related to orders of worth in the justification regime; on *utility* in the regime of the normal action; on *personal attachments* in the familiar regime. The possibility to share these languages and practices of valuation with others, thus assuring coordination and agreement, is unequal. When an evaluation is based on the reference to a legitimate order of worth, the possibility of agreement or disagreement on the valuable is open to a “generalised other” (Mead) since the value can be objectively tested through appropriate instruments and tools collectively devised at this purpose (Boltanski and Thévenot, 2006). The conventions that qualify and frame the involved entities according to general categories of worth allow for an objective test of the value without requiring a direct, in-depth, knowledge of the situation. In contrast, agreement or disagreement require a shared and direct experience of familiarisation when an evaluation is based on the familiar engagement. Nevertheless, far from being limited to the sphere of “the private”, valuations resting on ease assured by personal arrangements can be shared with others, since they are understandable to others, they can be communicated and they can sustain critical claims.

However, critique based on valuations resting on familiarity cannot be easily expressed in the public space. The latter is historically and culturally built on the principle that legitimate forms of valuation require a “detached” perspective on what the relevant features accounting for the worth or the utility of something or someone are: they require objectivity (Porter, 1995). Forms of valuing based on personal attachments can be understood by others and shared with them, but they are not acceptable as legitimate arguments in the public debate. They have to find a way to be articulated with legitimate definitions of the worth. This is a structural reason accounting for the unequal power of languages of valuation we can observe in public deliberation. Similarly, the increasing importance attributed in our societies to quantifiable expressions of the worth together with the privilege accorded to modes of coordination based on the negotiation of individual interests has progressively reduced the place for modes of valuation which rely on more qualitative appreciation of the worth.

#### **4 The value of the environment in the public space: “order incommensurability” and “radical incommensurability”**

If we conceive action as engagement and coordination with the environment there is an inner tension, thus revealed, in the very same word of “environment” and its uses in our societies, with major consequences for the understanding of environmental valuation conflicts. In fact, what we call the “Environment” (meaning “Nature”) is revealed as a specific way to qualify the environs or surroundings of some person, being or community and to engage with it, in terms of public or normal action. In these two modes of action a (human) subject is separated from and confronted to a (non human) object whereas in the familiar engagement the frontier between subject and object is blurred.

In the public sphere, the environment matters as nature. The public legitimate modes of valuing nature are plural and they are unevenly relying on quantified and measurable expressions of the value. Nature can be valued as “heritage” according to a domestic worth; or as expression of “wilderness”, according to an inspired worth; or as a “place of renown” according to a worth based on fame. These “orders of worth” are example of public legitimate modes of valuation not relying on a strictly quantified definition of value but still assuring a general ordering. In fact, general agreed upon modes of objectifying value are here at work, based on codified knowledge and expert judgment, that guarantee the possibility of ordering. When nature is valued as “economic good” according to a market worth or as a resource for production according to an industrial worth, quantified modes of valuation are introduced, in terms of prices or efficiency indicators. Nature can also be valued as a “public good” to which collective rights are associated : we can then speak about a civic mode of valuation of the environment. The increasing relevance of “biodiversity” as mode of valuation of the environment shows the progressive construction of a specific “green” order of worth largely still in the making and largely based on scientific quantification (Lafaye and Thévenot, 1993) .

These plural modes of valuation all rest on a same mode of engagement with the environment which is the publicly justifiable mode of engagement: the environment is framed by agents through

general and agreed upon categories of qualification. The environment is always a “qualified” environment.

It is thus possible to identify a first kind of *problem of incommensurability* that we are confronted with in environmental valuation conflicts. I propose to define it *order incommensurability*. By problem of order incommensurability I mean a critical situation in which there is difficulty to agree, in the public space, on the criterion of commensuration that is pertinent to test the legitimacy of a decision or action. When confronted with a problem of order incommensurability, disputes and controversies involve disagreement on how to commensurate but they do not involve *whether* to commensurate. The conflicting valuations at stake all rest on a public justification engagement of the agents with the environment. The conflict does not involve the nature of the appropriate evaluative judgment: it involves the common good aimed at through coordination. The modes of valuation that sustain a coordination oriented towards *market competition* are not the same as the ones sustaining a coordination to achieve *industrial efficiency*, or *civic solidarity*. However, in all these different cases the kind of engagement required from agents with the environment is the same and it requires commensuration in order to successfully coordinate with others.

The question that arises is how an agreement can be reached notwithstanding order incommensurability. A possible way out of this dilemma is to have one principle that dominates over the others. But from the evidence collected by Boltanski and Thévenot, the most frequent scenario is that of conflicting valuations reconciled in a “composite arrangement” or “compromise”. In a *compromise held in public* – which is different from a private arrangement reached by mutual agreement of the actors involved or the negotiation of interests – the imperative of justification is not satisfied but neither is it completely lost from sight: “In a compromise, the participants do not attempt to clarify the principle of their agreement; they are favourably disposed toward the notion of a common good without actively seeking one” (Boltanski and Thévenot, 2006: 277-278). In a compromise, different logics of commensuration are brought together to structure spaces of equivalence that are not completely coherent but solid enough to sustain a justifiable evaluative judgment and the following attributions of value.<sup>10</sup>

---

<sup>10</sup> In the domain of the environment, an example of what Boltanski and

However, environmental issues confront us with a different kind of problem of incommensurability, when the environment is valued on the basis of a familiar engagement. From this perspective, the environment is valuable since it is a “dwelled environment”.

I use the expression “dwelled environment” to refer to a place that a person values because she moves and feels “at ease” in it, and because memories are deposited there. The dwelled environment is the source of what I will call “environmental goods of proximity”. Following anthropologist Tim Ingold (2000), I consider as dwelled environment the environment we appropriate forging intimate bonds with human and non human beings in it and thus creating a place in which interactions occur effortlessly. The person is “distributed” in her dwelled environment which becomes a constitutive part of the person so that, if affected, the consequences rebound directly on her. However, from an external, non familiar, point of view, the dwelled environment can be just a “natural” environment, even a “wilderness”.

When studying environmental valuation conflicts concerning public decisions impacting the environment or compensations for environmental losses, we constantly come up against attributions of value based on familiarity and the difficulty of integrating them into the public process of valuation to which objectivation is so central. We are constantly confronted with problems of *radical* or *constitutive* incommensurability.

In fact, through familiar engagement people develop attachments to beings and objects they value since they participate in maintaining their *milieu*, in which the person is distributed (Berque, 2000; Breviglieri, 2012). They are valuable in a way that excludes commensuration, as commensuration would imply considering these persons, objects and other entities of the environment as separate and “equivalent” to others according to a general qualification or a simple function.

We can of course always commensurate them, but this would be meaningless from a dwelling perspective. These radically incommensurable beings can be equally valuable for other people but

---

Thévenot call a “public arrangement for the common good” is the reference to “sustainable development” (Godard, 2003). Sustainable development refers to a largely underspecified “common good”. That is why we can come across so many different definitions of sustainability. Nevertheless, arrangements for sustainable development can be defended in public and they justify decisions and agreements or enable critique.

not because we share a standard for judgement – which anyone, a generalised other, could apply – but because we share the same kind of engagement with these very same beings. “Clues” to understanding the value “from within” are at stake here, not ciphers to decode what makes their worth “from without” (Ingold, 2000).

Once detected the existence of these modes of valuation of the environment based on familiarity, and of the environmental goods of proximity they constitute, how to deal with the problems of their inclusion in the process of public decision and deliberation? They have to be either translated into interests or compatibilized through mediation with legitimate definitions of worth (Doidy, 2003; Richard-Ferroudji, 2011). If translation and mediations are not successful, these modes of valuation based on familiarity are excluded from the process of deliberation on what makes the value of the environment and they can give account of a source of critique opposing the legitimacy of public decision.

## **5 Environmental compensations as a scientific-technical problem and as a conflict of valuations.**

As pointed out by Cowell (1997), the idea that environmental compensations could reconcile social activities having major impacts on the environment and the objective to maintain the environmental resource base, rests on an idea of environment as “natural capital”. Environment is thus seen as a reservoir of environmental goods and services. Environmental services are defined according to an instrumental mode of valuation of the environment: the environment is valuable since it is useful in order to assure certain functions, to human beings and non human beings and entities (notably ecosystems). Environmental goods are defined as such according to conventional modes of valuation based on legitimate orders of worth. However, we have pointed out that an engagement of familiarity with the environment implies that a specific environment matters to a person in a way that gives rise to a specific kind of environmental goods: “environmental goods of proximity”. These environmental goods of proximity are not defined according to general criteria of worth but according to a specific kind of experience and relationship (attachment, ease) that links the person to a specific environment.

Commensurability as equivalence of functions or as equivalence of goods in a scale of worth is central to the idea of environmental compensations as a way to maintain environmental capital. Environmental goods of proximity, however, raise problems of radical incommensurability and they are usually not included in the definition of environmental capital. They thus configure a form of loss that remains more often than not invisible and unaccounted for in the public discussion concerning environmental damage (on this point see Centemeri 2011).

Environmental compensations however are not exclusively challenged in their being a proper response to environmental loss by the existence of environmental goods of proximity. In fact, concerning the equivalence of functions, when ecological functions are at stake, a scientific-technical problem emerges as to how define the compensation needs, how to choose the right measures and following up their success from an ecological point of view. These questions are all object of controversial discussions at scientific and technical levels (Rundcrantz and Skärbäck 2003). As remarked by Cowell (1997: 296) “environmental organizations have been extremely careful to limit the circumstances in which compensatory measures could legitimize damage to existing environmental qualities, particularly with respect to biodiversity objectives. (...) many semi-natural habitats cannot be adequately compensated because of deficient understanding of complex ecological processes and the technical and managerial problems of fully replacing species assemblages on relevant time-scales”.

These scientific-technical problems are coupled with problems raised once we question compensations in terms of compensating for the loss of environmental goods. The plurality of legitimate modes of valuation I have previously discussed helps to understand how a same environment could be valued as a public legitimate good according to different definitions of what accounts for an environmental good. I have pointed out that these plural definitions of the worth are unequally relying on quantification. Interpreting sustainability as the maintaining of environmental assets promotes a “calculative” approach to environmental loss and potential compensation which implies that modes of environmental valuation that are not relying on quantification may progressively slip from policy agendas.

These legitimate modes of valuation not relying on strict quantification (for example: environment as valuable landscape and

environment as valuable heritage) are particularly propitious to the articulation with mode of valuation based on familiarity: they can offer a way to “mediate” between valuation based on attachments and general forms of valuation.

When legitimate registers of valuation not based on quantification are considered in public decision as less relevant than the quantified ones, this implies a lexicographic ordering of modes of valuation that goes with little explicit attention given to attachments to the environment as a source of environmental goods. Moreover, valuations based on personal attachments can be crucial to the construction of a social critique and social mobilization challenging the acceptability of environmental compensations as a way to solve the problem of the negative impacts of plans and projects meant to promote economic development.

In fact, the burden of ameliorating the tensions between commitments to protecting environmental quality (threatened by plans and projects) and objectives of economic development (basically the tensions implicit in the principle of sustainable development), falls more and more upon environmental compensations (especially habitat creation and restoration techniques). At the same time, the recognition of an “higher interest” justifying the projects and plans causing environmental degradation implies that environmental compensation need not be justified strictly as equivalent. The “higher interest” implies to accept a sacrifice of various kinds of environmental goods, especially “environmental goods of proximity”.

In conflicts against plans and projects, those who oppose plans and projects usually challenge both the legitimacy of the “higher interest” and the acceptability of compensations. As remarked by Cowell (1997, p.298) “determining what might compensate for a particular environmental loss is shown to be a messy question, inextricably bound up with value-laden scientific and political judgments”.

In fact, we can never judge about the acceptability of an environmental compensation without considering more in general the issues related to the legitimacy of the plans and projects that justifies the environmental loss. It follows that acceptable compensations are those that soundly compensate (in scientific, technical and social terms) for projects whose general interest is not a case for conflict. Through the case of the opposition to the Malpensa airport expansion I am going further to discuss this issue.



## **6 Compensations and incommensurabilities in the case of the expansion of the Malpensa airport.**

The Malpensa “City of Milan” airport is situated approximately 50 Km northwest of the city of Milan (Lombardy, Italy). It has a surface area of 1.220ha and its impacts have influences on the territories of two regions, Lombardy and Piedmont. The airport site borders the Regional Park of the Ticino river, a protected natural area instituted by a regional law in 1974, and classified since 2002 as a “Man and Biosphere” (MAB) reserve by UNESCO. Various protected sites under the “Habitat” Directive are situated near the airport. The proximity to the Ticino Park has been since the 1970’s a strong argument for limiting the expansion of the airport.

The airport is managed by Sea (*Società esercizi aeroportuali*), a joint stock company controlled by the Municipality of Milan. The current phase of expansion of the Malpensa airport is the result of a long and complex story of contested previous expansions. The current plan of expansion presented by Sea includes the construction of a third runway (besides the two already existing ones), a new terminal, and the expansion of the so called “Cargo City”, an area equipped for storing goods and that host commercial facilities. In fact, Sea has a business expansion strategy based not only on airport business, but also on real estate investments (Beria and Scholz 2010, 72).

An additional area of 330ha, largely a natural area (not protected), will be included in the airport borders if the plan is approved. The plan for the expansion is currently undergoing a procedure of Environmental Impact Assessment (EIA) and it is raising oppositions in the communities that are going to be affected. Displacements of inhabitants are planned in the hamlet of Tornavento if the third runway is realized.

I can not enter into the details of the complex and long story of conflicts related to the expansions of the Malpensa airport. I am going to try to introduce those elements that are relevant in order to understand why the legitimacy of the project is contested at the local level and how compensations enter the scene.

*The first plan of expansion: “The Great Malpensa” (1972-1987)*

The idea of expanding the Malpensa airport – existing since 1948 as a two runways international airport - has been considered since mid-1960’s. The first official project of expansion, called the “Great Malpensa” plan, approved in 1972, contemplated the creation of a third

runway adjacent to the area that in 1974 was established, through the Lombardy Regional Law n.2, as the protected area of the Ticino Park.

The airport expansion plan, elaborated by S.e.a. and designed for a traffic of 6 million passengers per year, was based exclusively on air traffic forecasts, which confirmed the strong positive trend of air transportation. The expansion was thus justified by expected trends of air traffic development.

The plan of expansion of the “Great Malpensa”, once communicated to local authorities, was confronted to harsh oppositions raised by a front formed by local administrations, trade unions, inhabitants, environmental NGOs, all federated against the expansion. The opponents of the expansion denounced the lack of participation and inclusion in the decision-making process (Feldman 1977). These groups denounced as well the heavy costs inflicted on the territory, environmental costs but as well social costs: the airport expansion would have changed radically the socio-economic organization of the territory, its typical way of life. Besides, they contested Sea’s lack of serious territorial planning, showing how relevant aspects were missing in Malpensa’s expansion plans, especially the territorial integration of the airport through appropriate infrastructures of access. The situation is that of a typical scenario of order incommensurability in valuing costs and benefits, goods and bads, of the expansion.

The Lombardy Region, at that time a young institution in search of legitimacy, with no particular stake in the process of airport expansion, assumes the role of arbiter and creates the condition for the elaboration of a compromise.<sup>11</sup> Starting from 1977, the Region creates a series of commissions, both political and technical, in which the problems of the expansion are discussed with the broad range of institutional actors involved, from Sea to municipalities.

At the same time, the most important political parties express an opinion concerning the expansion as a necessary step towards the modernization of infrastructures but that should go with paying attention to the environmental impacts. Trade unions as well, at the regional level, agree with the idea of a “reasonable” expansion which incorporates a compromise between modes of valuation related to

---

<sup>11</sup> Italian Regions were implemented as institutional level of State organization in 1970.

market and industrial orders and modes of valuation taking into account civic, domestic and green modes of valuation of the environment.

Sea develops a new project of expansion, without a third runway. This is the plan called “Malpensa 2000”, targeted on a volume of passengers of 12 million (18 million as a maximum). The authority of the Ticino Park is very critical of the project for its potential environmental impact. The municipalities of the Malpensa area, on the contrary, are all aligned on the idea of a reasonable expansion. They approve the new plan still expressing concerns for its environmental impacts and asking for a study of Environmental Impact Assessment. The possibility of the compromise through the idea of “reasonable expansion” is based on the construction of a system of monitoring devices (of social and environmental impacts of the airport) that is crucial in order to test the reasonability of the expansion. However, this system of monitoring devices has never been implemented. The compromise reached through the idea of reasonable expansion is thus not equipped with the appropriated “tests of reality”.

In June 1986, the Regional Council finally approves the plan for “Malpensa 2000” asking for an Environmental Impact Study. Even if the Directive 85/337/Cee imposing EIA on certain private and public projects has not yet been adopted at the national level, Sea commissioned a study of environmental impact that is presented as respecting European standards. In fact, once submitted to the analysis of the “Group of evaluation of EIA studies” of the Lombardy Region, a technical unit created in 1984, the study is shown not to follow important methodological guidelines, especially the elaboration of alternative scenarios of development, including the “do nothing” option. The option of not expanding Malpensa and to develop alternative hypothesis (namely a multi-polar system of airports in the Milan area) has never been taken seriously into account in the discussion concerning Malpensa expansion.

The document presented by Sea includes a “Green plan” which introduces basic forms of environmental compensations. At that time, no serious exam in terms of ecosystems and flora and fauna compositions is done. Compensations are mainly monetary transfers to the Ticino Park authority for financing activities of reforestation. The environmental impact is considered mostly in terms of water and soil pollution, waste cycle, noise. There is no analysis in terms of biodiversity loss or impacts on the landscape.

In February 1987 the Ministry of Transport approves “Malpensa 2000” in the version revised by Lombardy region. In 1988, the Region signs with Sea an agreement for the production of further studies on the environmental impacts of the expansion. These studies are not realised.

*“Malpensa 2000”: rise and fall of an international hub (1990-2008)*

The works of renewal and expansion of Malpensa begins in 1990. In 1992 and for two years, works were stopped due to the involvement of Sea. in “Tangentopoli”<sup>12</sup>. The direction of Sea was investigated for corruption together with political representatives at the provincial and regional levels. The corruption is revealed to have been particularly widespread in the procedure of definition of the “Malpensa area plan”, an instrument of planning that was supposed to help the reasonable integration in the territory of the new activities and infrastructures linked to the airport.

The “Malpensa 2000” project was re-launched in 1994, under the first government of Prime Minister Silvio Berlusconi (1994-1995), through its inclusion in the list of the 14 priority projects selected for the creation of the Trans-European Transport Network (TEN-T). “Malpensa 2000” is presented as a potential “European gateway” - an international “hub”<sup>13</sup> - for southern Europe. However, Malpensa was far from having the conditions to operate as a hub (a major problem was the lack of infrastructures of access). Moreover the plan approved for Malpensa 2000 limited the expansion to a volume of traffic of 8-12 million passengers per year, way below the threshold of passengers of an efficient hub.

The inclusion of Malpensa in the TEN-T was quite controversial. The “pro-Malpensa front” includes now clearly the Lombardy Region. Far from being the arbiter of the 1970’s, the Region of the 1990’s is aligned with Sea. For the Lombardy Region, Malpensa 2000 is “not only for Lombardy, but for the whole Country, a goal that cannot be renounced” (Declaration of the Regional councillor for transport,

---

<sup>12</sup> In February 1992 the discovery of a minor instance of political corruption in Milan triggered a broad judiciary investigation which rapidly led to the collapse of the political system that had governed Italy for over forty years.

<sup>13</sup> A “hub” is a central airport that flights are routed through. “Spokes” are the routes that planes take out of the hub airport, that is why we speak about a “hub and spoke” model that at the end of the 1970’s replaced a “point to point” model (direct connections) in the US civil aviation system.

1995). The opportunity of expansion of the Malpensa airport is presented by the regional and national governments as a higher interest which justifies the sacrifice of valuable goods, as the case of environmental goods. In this frame, environmental and socio-economic compensations are used as an instrument to assure the consensus of the local populations. It is at this stage that a clear lexicographic ordering of modes of valuation is established by public authorities, stating that market and industrial modes of valuation should be considered as more important in the public decision than other modes of valuation.

A final agreement on the inclusion of Malpensa 2000 among the priority projects of the TEN-T network is reached in June 1996. It is important to notice that the European Parliament in its decision 1692/96 defines common orientations in the development of the Trans-European Network of Transportations including the need to consider the environmental impacts of these projects. At the European level there are visibly contrasting positions concerning infrastructural development, with the Parliament supporting the demand for environmental sustainability. In the art.8 of the decision it is stated that Member States have to take into account environmental preservation in the definition and realization of the projects, through EIA procedures (according to directives 85/377/CEE and 92/42/CEE on the conservation of natural habitats). Considering this article, the proximity of the Ticino Park to Malpensa 2000 turns the mega-project vulnerable in terms of its responding adequately to criteria of environmental sustainability. In fact, as we already noticed, no formal procedure of EIA was performed on the airport project expansion.

Considering this evolution at the European level, in April 1998, with the opening of Malpensa 2000 planned in October, the Italian Minister of the Environment Edo Ronchi<sup>14</sup>, writes to the Minister of Transport to communicate the necessity to submit the Malpensa 2000 project to a EIA procedure, given the important transformations that the project has undergone since the environmental impact study realized by S.e.a. in 1986. Ronchi remarks “a huge increment in the activity of the airport and the radical change of its original function”.

---

<sup>14</sup> Edo Ronchi was with Francesco Rutelli one of the funders of the Italian Green Rainbow Party. He was the first “Green” Minister of the Environment in the Prodi’s Government.

The necessity of a EIA procedure on Malpensa becomes the main argument of the local grassroots mobilization. Notwithstanding this controversial situation, Malpensa 2000 becomes operative the 25th of October 1998. Due to the sudden increase in the number of flights (Malpensa 2000 is now operating with 16-17 million passengers per year), the question of the environmental impacts of the airport becomes critical.

The 2nd of July 1999 (with the airport operative since October) Sea presents to the Ministry of the Environment, to the Ministry of Cultural Activities and Heritage and the Lombardy Region the Study of Environmental Impact. No environmental compensations are included in the study: a tax on noise and the displacement of the population most affected by noise are presented as compensation measures. The study lacks any serious analysis of the impact of the airport in terms of flora, fauna and ecosystems. Reforestation is evoked as the only environmental compensation. No analysis in terms of impact on landscape is considered. No elements are given concerning the reforestation implemented following the Green plan of the 1980. This reveals the lack of a serious follow up of the previous engagements assumed by Sea.

70 observations, all negatives, are presented by local authorities, Piedmont and Lombardy Regions, grassroots movements, associations, citizens. The 25th of November 1999 the Ministry of the Environment states that any additional increment of flights in Malpensa should be forbidden. The decision states that in order to minimize the negative impact of the airport it is necessary to implement mitigations measures, first of all through finding a technical solution to reduce noise on the short term and working to a substantial redesign of the uses of the airport in the long term.

In order to find a way out of this situation, the President of the Council Massimo D'Alema emits a decree (DPCM 13 December 1999) in which the plans for further increasing Malpensa's traffic are confirmed, still with a clear engagement in reducing the environmental impact of the airport through interventions of mitigation. Among these interventions is included the displacement of the population living in the area more exposed to noise pollution. Regular programs of monitoring are as well included as mid-term interventions. They should include epidemiological surveys and studies on the quality of water,

quality of air, forest damages. However these programs of monitoring (required already in the 1980's) are not implemented.

In the meantime, Malpensa is registering a traffic in 1999 of 17 million passengers. This same year the Lombardy region approves the "Integrated territorial plan of Malpensa" (Regional Law 10/1999) which is meant to be an instrument to help the integration of the airport in the territory. The plan includes a new "Green plan" which designs the realization of a series of green corridors but without any serious study of the impacted ecosystems. In particular, the plan frames the potential conflicts between the park and the airport in terms of using environmental compensation as a way to smooth the tensions. A logic of ex-post use of environmental compensations to gain acceptability of the expansion of the airport is explicitly stated. Environmental compensations are just one of the measures used to try to build a consensus on a contested project.

In order to have an expert opinion concerning the capacity of expansion of the Malpensa airport, taking into account the measures imposed by the D'Alema decree, the European Commission asks the Cranfield University to develop a study. Apart from remarking that some of the measures introduced by the D'Alema decree are not respected, the consultants of the Cranfield University suggests the creation of a third runway in order to distribute the impact in terms of noise.

Citizens criticize this study and ask the European Union to take seriously into account the environmental problems engendered by the airport.

The Directive 42/2001/CE introduces at the European level the procedure known as Strategic Environmental Assessment (SEA). The SEA procedure can detect the cumulative effect of impacts coming from interconnected projects, an issue particularly critical in the Malpensa case where the way to proceed has always been by single project with the lack of coherent planning.

After the 11th of September 2001 Malpensa suffers a loss of passengers as it happens all around the world. Notwithstanding the crisis, Sea starts to speak about the second phase of expansion of Malpensa 2000 with increasing the capacity of the Cargo City and a third runway.

In 2005 the authority of the Ticino Park voluntarily supported the realization of a Strategic Environmental Assessment that analyses the

whole territory of the Park, included the airport, and the areas affected by the new interventions planned by Sea, showing the lack of a coherent territorial planning, the environmental degradation and damages to the health of local communities due to pollutants, the excessive environmental load on the Ticino Park and the limits of the socio-economic benefits. Nevertheless, in the same year, Sea proposes to the Lombardy Region to increase the airport capacity to 40/45 million passengers/per year and to build the third runway.

*The de-hubbing of Alitalia and the new plans for expansion (2008-)*

In 2008 Sea announces in its industrial plans further developments of air traffic to be expected for the next years (2013-2014), in connection with the event of the Expo 2015 to be held in Milan. Therefore, in the short term, interventions are planned to increase the capacity of the airport: the construction of a third terminal by 2015 and the third runway necessary to improve the overall capacity of the infrastructure. The third runway is supposed as well to mitigate the noise impact on the territory (ENAC, 2010).

In order to justify the expansion, data concerning the evolution of air traffic are once more crucial.

In 2010 Sea master plan with the third runway, developed and designed by MITRE – USA, was approved by Enac<sup>15</sup> and it is now submitted to a procedure of EIA.

In the meantime, the opposition to the plans of expansion starts to re-organise. This opposition demands to submit the new Malpensa expansion to a procedure of SEA, and not simply to a procedure of EIA. The environmental impacts considered are not simply acoustic pollution. In fact, airplanes are causing a pollution related to hydrocarbons which is suspected to cause damages to environmental and human health.

The study of environmental impact presented by Sea for the EIA is now including sections specifically devoted to landscape and biodiversity. Nevertheless, these sections had to be complemented with additional documentations given the lack of details concerning namely environmental compensations. 2.600 negative evaluations of the study of environmental impact initially presented by Sea have been sent to the Ministry of the Environment during the procedure by various

---

<sup>15</sup> The Italian regulation agency for air transport, which is the responsible for airports' master plans evaluation.



actors, including the authority of the Ticino Park, environmental NGOs, local groups, municipalities.

The way in which the study of environmental impact frames the environment is mainly in terms of environmental functions in order to define equivalences that allow for compensations. However, these compensations are largely left to be defined in the future. What is more, areas that were used in the past for compensating the expansion of the 1990's are presented again as possible areas in which to implement the new compensations. The large majority of the negative observations sent to the Ministry of the Environment by actors opposing the expansion points out that previous environmental compensations were not or only partially implemented. The long story of lack of implementation of environmental compensations and monitoring programs has created a lack of trust in the seriousness of compensations promised by Sea. The fact that how to compensate for the loss of environment is a question largely left by Sea to an envisaged committee to be created in the future (in which to involve experts, local and regional authorities, environmental NGOs) is a point that the opponents to the expansion raise as problematic. How to decide on the expansion without knowing if the envisaged compensations are feasible or not?

In this phase of the conflict, I want to draw attention to the action of the grassroots movement "Viva via Gaggio" (Hurrah for Gaggio road), initially a small local group of young activists living in Tornavento, the most impacted locality in case of construction of a third runway. This group –born in 2010- is introducing a new way to speak about and act in defence of the environment which is of particular interest to me since it is based on modes of valuation of the environment which relies on an engagement of familiarity. This group actively tries to produce the radical incommensurability of the environment under threat, especially the heath land surrounding the Gaggio road.

The Gaggio road links the small city of Lonate Pozzolo to the hamlet of Tornavento and crosses the area that would be absorbed by the airport if Sea plan is approved. This road goes through an area which is an area of heath land. Heath lands are specific ecosystems quite rare in the Mediterranean area. The Heath lands of Lombardy have been progressively destroyed. But heath lands are recognised in the Habitat Directive (92/43/EEC) as ecosystem to be protected. Nevertheless the heath land of Gaggio is not yet recognized as a "Directive Habitat" site. In 2011 the authority of the Ticino Park has started the procedure to

have this heath land recognised as Natura 2000 site. This decision is related to the activity of the grassroots movement that has succeeded in producing evidence of the ecological value of the Gaggio heath land.

The Gaggio road in the 1990's was an abandoned path. But a group of local volunteers started to recover it. This group recovered as well historical remnants from the nineteenth century to the second world war, witnessing of the agricultural past of the place and of its history of road of frontiers between the Austrian Empire and the Savoy Kingdom (until 1861), and its history of occupation by German military forces (in 1943-1945). These remnants are catalogued and explained through a series of posters as in a sort of museum in open air.

After being recovered by local volunteers, the road has been known only locally to the population of Lonate until the creation of the grassroots movement Viva via Gaggio that turns this road not only into a symbol of the fight against the airport expansion but into a real place of attachments. In 40 years of struggle against the expansion this is the first time that the environment under threat is clearly identified with a specific place. This identification of the environmental impact as threat to a precise place goes with the use of registers of valuation that rest on affection and attachments.

In fact, the Gaggio road and its environment become in the action of the group a *person*: this road has feelings, identity, a past; the road is "one of the family", "a relative" that we need to protect. The group uses expressions like "the death of Gaggio road", as it was a person. People are invited to "come and meet the Gaggio road" and to "stay close as much as possible to our relative who is threaten, who's going to die", where the relative is the road and its environment.

This grassroots movement starts from the initiative of Roberto V., a 30 something from Lonate Pozzolo, working in the municipality, with no political engagement in political parties or other movements. When the plans of expansion are published, he is surprised by the lack of local reactions in Lonate, given that one of the consequences of the expansion will be displacements in this town. So he decides that it is necessary to wake up people from their "civic coma", as he says.

How to wake up people from their apathy? Roberto starts in 2010 to record videos that he calls "chat in the Gaggio road". The idea is to call people who are experts of the airport issues, economy issues, and environmental issues and to walk with them in the Gaggio road while discussing pros and cons of the expansion. He posts these videos on

Youtube and on a blog. The group take shapes through the blog and starts to exist as grassroots movement (*comitato*) since February 2010.

The blog has various sections and it shows the multiple registers of critique that the group is able to mobilize. We find data on environmental damage, administrative documentations, a petition, that is, a “classical” tool of mobilisation. But there is as well a page called “scrub” (brushwood) which is about biodiversity and the Gaggio heath land. This page has become an autonomous blog in which the biodiversity of the Gaggio heath land is explained by a local expert through the photos he makes, with his comments that are scientific but as well showing feelings of attachment for the place. This initiative has then brought to proper scientific studies of the biodiversity of the area: various protected species (butterflies and birds) have been detected. These studies have been crucial in the decision of the authority of the Ticino Park to start the procedure to have the Gaggio heath included as a protected Natura 2000 site.

But the group is not active exclusively on the web. To “wake up” people from their “civic coma” Viva via Gaggio organizes strolls and promenades in the Gaggio road. The first stroll (organised the 21st March 2010, and called “The Spring of Gaggio road) is announced in the blog as a “stroll for information and of attachment to the Gaggio Road”.

Through the action of Viva Via Gaggio various people differently attached to the Gaggio Road find an opportunity to express and share with other this attachment. This happens especially through the Facebook page of the group. Using the instrument of tagging photos, lovers of the Gaggio road share on the page of the group their experience of the Gaggio road: observing remarkable species, sharing feelings, contemplating natural beauty.

The group organizes as well activities to bring new people to know the Gaggio road: strolls, sport events (especially bicycle); camping in the Gaggio road (“Campogaggio”); art events.

In their activities, the activists of Viva via Gaggio are relying on a mode of engagement of familiarity with the environment in order to share with other people a mode of valuation in which this environment is valuable first of all because it is a place of personal attachment. These modes of valuation turn out to be a powerful resource for motivating people in participating in collective activities. These activities are first of all leisure activities done in common with others.

The group actively promotes the creation (or rediscovering) of environmental goods of proximity linked to conviviality: the environment is valuable since people are attached to it because of this environment being the place of sharing with others common activities and a feeling of commonality. People are not supposed to be simply users or consumers of the Gaggio road. They are supposed to *care for* the Gaggio road and its environment. Feelings of attachment and care are thus the basis on which a proper political mobilisation is built. Previous to mobilisation, it is a “place awareness” (*coscienza di luogo*, Magnaghi, 2010) that these activists are trying to arouse. Personal attachments are the point of departure for recognizing the radical incommensurable value of the environment under threat. But this is not enough: activists have to find a way to articulate this radical incommensurability with more legitimate registers of valuation in the public space.

It is in particular the category of cultural *heritage* that is mobilized together with the value in terms of *biodiversity*. Both these modes of valuation are compatible with modes of valuation based on attachments.

The activists of Viva via Gaggio promote and sustain forms and modes of local attachments to the environment but they work as well to articulate modes of valuation based on familiarity with more legitimate modes of valuation. In this articulation, a key-figure is that of the *attached-expert*. The attached expert is a person having scientific and expert knowledge of the environment (biologists, environmental lawyers, local historians) but sharing as well the attachment to the place. This attachment is considered as a mode of knowing and connecting to the environment and it is considered as co-constitutive of the ecological and historical value. The ecological value, in terms of biodiversity, exists because of people caring for the environment and considering this environment as unique.

As we can read in the observations written by the institution running the Ticino river Park to criticize the study of environmental impact presented by Sea, the heath is an ecosystem which can hardly be artificially recreated since its origins are in a certain evolution of the ways of human use and occupation of the land. This way to understand biodiversity is propitious to the inclusion of local attachments to the environment as a source of environmental value.

The construction of the value of the environment starting from attachments implies to impose a limit to the possibility of compensation, once the environment is considered as a place and as a “dwelled environment”. However, the general modes of valuation most propitious to the articulation with a valuation based on attachments (the domestic mode of valuation, the inspired one and the green one) are in the case of the public decision on Malpensa expansion considered as inferior to the market and industrial modes of valuation of the environment.

In fact, the study of environmental impact shows how economic and industrial modes of valuation are emphasized by Sea to justify the necessity of the expansion. Concerning the environment, potential damages are recognised but environmental compensations and monitoring of health and environment are considered as a proper way to address the future damages. In particular, concerning the ecological compensation of the heath land loss, the idea that it would be possible to recreate the same ecosystem elsewhere becomes one of the most contested issues.

The struggle is then on the possibility or not to compensate the loss of the Gaggio road (as heritage) and of the Gaggio heath (as unique ecosystem). Starting from promoting a familiar engagement to the Gaggio road (which constitutes its value as incommensurable), Viva via Gaggio tries to find ways to fight against the general commensurability of environmental loss which is assumed in the study of environmental impact document. In this struggle a domestic order of worth and a green order of worth are allied in creating the condition to translate modes of valuation based on personal attachments into more general standards of valuation that impose a limit to equivalence. However, the fact that the space of public decision is structured with a hierarchical priority accorded to market and industrial modes of valuation implies the exclusion of those standards of valuation more propitious to the inclusion of valuations based on attachments. In this frame, compensations are not used to build a real compromise between conflicting orders of worth: they are used to build social acceptability.

For the moment, notwithstanding the negative advise of the regional experts called to evaluate the study presented by Sea, the Lombardy regional government has given a positive advise concerning the impact assessment saying that, even if environmental damages are probable, the strategic role of the airport, at an economic level, largely justifies

the decision to approve the plan of expansion. This decision shows once more that there is a clear lexicographic ordering of the modes of valuation at stake, so that environmental compensations are not meant really to compensate for what is lost but to promote the acceptability of the environmental sacrifice required in name of a higher interest (economic development). Modes of valuing the environment as heritage, as landscape, as valuable ecosystem are considered lexicographically inferior to the valuation based on industrial and market orders of worth. However the legitimacy of this ordering is challenged by inhabitants, through a critique which not only brings to the fore other relevant goods that should be preserved (including environmental goods of proximity) but which raises the doubt on the fact that the airport could really enhance economic development. The denunciation of private interests (of Sea as real estate company) masked as general interest is equally strong in the mobilisation showing a general scenario of lack of trust in the airport expansion being an expression of a general interest.

## **7 Final Remarks**

The case of Malpensa is an example of how environmental compensations can be instrumental to promoting the acceptability of an idea of sustainable development which is based on a clear hierarchy of modes of valuation, where market and industrial worth are at the top. When this is the case, all those modes of valuation that introduce elements of partial or radical incommensurability of an environment - in the sense of the impossibility to establish an equivalence of the goods it provides - are considered as not pertinent for public decision, and, at best, deemed of attention through compensations. When this is the case, compensations are clearly related to a sacrifice which is recognized as not fully compensable but that is justified in name of a higher general interest. The acceptability of environmental compensations is thus related to the consensus surrounding the definition of the general interest at stake.

The case of Malpensa is a good example of technical, scientific and institutional difficulties that environmental compensations have to face. Who is assuring the control on the correct implementation of the compensations? How to evaluate the results in ecological terms? How

to estimate the financial investment needed to implement compensations? Where to find the areas in which to implement compensations? How to solve conflicts related to the necessity to use private lands to implement compensations? Is an ecosystem like the heath land really reproducible? If taken seriously, environmental compensations confront us with the difficult task to define a sound institutional and technical frame to assure the production of the envisaged environmental goods. If taken seriously, compensations can call into question the feasibility of the plans and projects whose impacts they are supposed to balance. However, it is important to point out that even the most perfect scientific and institutional design of environmental compensations can not entirely assure the compensability of the lost environmental values once this environment is the place of what I have called goods of proximity. Once we consider the environment as a place of personal and collective attachments it is clear that there are limits to the possibility to find compensations by equivalence in that these attachments turn this specific environment into a spatial-temporal unique. The social legitimacy and acceptability of environmental compensations is thus a problem not simply of negotiating conflicting interests. Plural modes of engagement and of valuation of the environment are here at stake. How to create the conditions for making these plural modes of valuation “compatible” is a crucial social and political problem. In this respect, the case of Malpensa is showing us what not to do, that is, to impose from the top a hierarchy of modes of valuation. 40 years of conflicts are a good example enough of the political and social non sustainability of this way to deal with the unavoidable order and radical incommensurabilities that public decision on environmental issues necessarily raises.

## **References**

- Adler, M. 1998. ‘Law and Incommensurability: Introduction’. *University of Pennsylvania Law Review* 146: 1169-1184.
- Bénatouil, T. 1999. ‘A Tale of Two Sociologies: The Critical and the Pragmatic Stance in Contemporary French Sociology’. *European Journal of Social Theory* 2(3): 379-396.

- Beria, P., and A.B. Scholz. 2010. 'Strategies and pitfalls in the infrastructure development of airports: A comparison of Milan Malpensa and Berlin Brandenburg International airports'. *Journal of Air Transport Management* 16: 65-73.
- Berque, A. 2000. *Écoumène : introduction à l'étude des milieux humains*. Paris: Belin.
- Bidet, A., L. Quéré and J. Truc. 2011. 'Ce à quoi nous tenons. Dewey et la formation des valeurs. Présentation'. In J. Dewey, *La formation des valeurs*. Paris: La Découverte.
- Blokker, P. 2011. 'Pragmatic sociology: Theoretical evolution and empirical application'. *European Journal of Social Theory* 14 (3): 251-261.
- Boltanski, L. 1990. *L'amour et la justice comme compétences. Trois essais de sociologie de l'action*. Paris: Métailié.
- Boltanski, L. and E. Chiapello. 2005. *The New Spirit of Capitalism*, London-New York: Verso [First French ed.: *Le nouvel esprit du capitalisme* Paris, Gallimard 1999].
- Boltanski, L. and L. Thévenot. 1999. 'The Sociology of Critical Capacity'. *European Journal of Social Theory* 2 (3): 359-377.
- Boltanski, L. and L. Thévenot. 2006. *On Justification: Economies of Worth*. Princeton: Princeton University Press [First French ed: *De la Justification. Les Economies de la grandeur* Paris, Gallimard 1991].
- Breviglieri, M. 2012. 'L'espace habité que réclame l'assurance intime de pouvoir: Un essai d'approfondissement sociologique de l'anthropologie capacitaire de Paul Ricoeur'. *Études Ricoeuriennes / Ricoeur Studies* 3 (1): 34-52.
- Centemeri, L. 2011. 'Retour à Seveso. La complexité morale et politique du dommage à l'environnement'. *Annales. Histoire, Sciences Sociales* 66 (1): 213-240.
- Chang, R. (ed.) 1997. *Incommensurability, Incomparability, and Practical Reason*. Cambridge: Harvard University Press.
- Cowell, R. 1997, 'Stretching the limits: environmental compensation, habitat creation and sustainable development'. *Transactions of the Institute of British Geographers*, 22 (3): 292-306.



- D'Agostino, F. 2003. *Incommensurability and Commensuration. The Common Denominator*. Aldershot: Ashgate.
- Desrosières, A. 1990. 'How to Make Things Which Hold Together: Social Science, Statistics and the State'. In P. Wagner, B. Wittrock and R. Whitley (eds.) *Discourses on Society: The Shaping of the Social Science Disciplines*. Dordrecht: Kluger.
- Desrosières, A. 1992. 'Discuter l'indiscutable. Raison statistique et espace public'. In A. Cottureau and P. Ladrière (eds.) *Pouvoir et légitimité : figures de l'espace public*. Paris: Éditions de l'EHESS.
- Desrosières, A. 1998. *The Politics of Large Numbers: A History of Statistical Reasoning*. Cambridge, Mass.: Harvard University Press [First French ed.: *La politiques des grands nombres* Paris, La Découverte 1993].
- Dodier, N. 1993. 'Action as a combination of 'common' worlds'. *Sociological Review* 41(3) :556-71.
- Doidy, E. 2003. 'La voix des usagers dans les concertations environnementales'. *Sociologies pratiques* 7: 49-64.
- Espeland, W. N. 1994. 'Legally Mediated Identity: The National Environmental Policy Act and the Bureaucratic Construction of Interests'. *Law and Society Review* 28(5): 1149-1180.
- Espeland, W. N. and M. L. Stevens. 1998. 'Commensuration as a social process'. *Annual Review of Sociology* 24: 313-343.
- Godard, O. 2003. 'Développement durable et principes de légitimité'. *Information sur les Sciences Sociales* 42(3): 375-402.
- Gowdy, J. and J.D. Erickson. 2005. 'The approach of ecological economics'. *Cambridge Journal of Economics* 29: 207-222.
- Ingold, T. 2000. *The perception of the environment: Essays on livelihood, dwelling and skill*. London: Routledge.
- Lafaye, C. and L. Thévenot. 1993. 'Une justification écologique ? Conflits dans l'aménagement de la nature'. *Revue Française de Sociologie* 34(4): 495-524.
- Lafaye, C., M. Moody and L. Thévenot. 2000. Forms of Valuing Nature: Arguments and Modes of Justification in Environmental Disputes. In M. Lamont and L. Thévenot (eds.), *Rethinking*

*comparative cultural sociology*. Cambridge: Cambridge University Press.

Lamont, M. 2012. 'Toward a Comparative Sociology of Valuation and Evaluation'. *Annual Review of Sociology* 38: 201-221.

Magnaghi, A. 2010. *Il progetto locale. Verso la coscienza di luogo*. Torino: Bollati Boringhieri.

Martinez-Alier, J. 2002. *The Environmentalism of the Poor. A study of ecological conflicts and valuation*. Cheltenham, UK: Elgar.

Martinez-Alier, J., J. O'Neill and G. Munda. 1998. 'Weak Comparability of Values as a Foundation for Ecological Economics'. *Ecological Economics* 26: 277-286.

O'Neill, J. 2007. *Markets, Deliberation and Environment*. London: Routledge

O'Neill, J., A. Holland and A. Light. 2008. *Environmental Values*. London and New York: Routledge.

Porter, T. M. 1995. *Trust in Numbers. The Pursuit of Objectivity in Science and Public Life*. Princeton: Princeton University Press.

Raz, J. 1986. *The Morality of Freedom*. Chicago: Clarendon Press.

Richard-Ferroudji, A. 2011. 'Limites du modèle délibératif : composer avec différents formats de participation'. *Politix* 4 (96): 161-181.

Rundcrantz, K. and Skärbäck, E. 2003. 'Environmental Compensation in Planning: A Review of Five Different Countries with Major Emphasis on the German System'. *European Environment* 13: 204-226.

Silber, I. F. 2003. 'Pragmatic sociology as cultural sociology: beyond repertoire theory?'. *European Journal of Social Theory* 6(4): 427-49.

Spash, C. L. 1999. 'The development of environmental thinking in economics'. *Environmental Values* 8(4): 413-435.

Thévenot, L. 1990. 'L'action qui convient'. In P. Pharo and L. Quéré (eds.) *Les formes de l'action*. Paris: Ed. de l'EHESS.

Thévenot, L. 2001. 'Pragmatic regimes governing the engagement with the world'. In K. Knorr-Cetina, T. Schatzki and E. von Savigny (eds.) *The Practice Turn in Contemporary Theory*. London: Routledge.

Thévenot, L. 2006. *L'action au pluriel. Sociologie des régimes d'engagement*. Paris: La Découverte.

Thévenot, L. 2007. 'The Plurality of Cognitive Formats and Engagements: Moving between the Familiar and the Public'. *European Journal of Social Theory* 10 (3): 413–27.

Thévenot, L. 2011. 'Power and oppression from the perspective of the sociology of engagements: a comparison with Bourdieu's and Dewey's critical approaches to practical activities'. *Irish Journal of Sociology* 19(1): 35-67.

Vatin, F. 2013 'Valuation as evaluating and valorizing'. *Valuation Studies*, 1.

Wagner, P. 1999. 'After Justification: Repertoires of evaluation and the sociology of modernity'. *European Journal of Social Theory* 2(3): 341-57.