Of Wolf and Man: Learning Reason-able Valuation

Juha Hiedanpää

Finnish Game and Fisheries Research Institute

Yliopistonkatu 6

80100 Joensuu

Finland

Phone + 358 50 3638109

Fax +358 20 575 1409

juha.hiedanpaa@rktl.fi

Paper presented at the 5th bi-annual conference of the United States Society for Ecological Economics (USSEE) in Washington DC, May 31 - June 3, 2009

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Abstract

Wolf (*Canis lupus*) is an endangered species and strictly protected in Finland by the European Union's Habitats Directive. Consequently, the Finnish wolf population size has increased and started to steadily expand from the east to the west of Finland. The outpouring of positive and negative social emotions, damages, and illegal hunting have created a true pressure to start designing and facilitating new approaches, means and policy instruments for the evaluation of the wolf's impacts on human wellbeing and livelihoods. In this paper, I describe how the undergraduate course on environmental economics served as a laboratory for creating and testing the principles of reasonable valuation in the context of wolf policy in SW Finland. In their work, the students combined discursive, multi-criteria, and economic methods of valuation and valuing as they designed a procedure for valuing the actual, potential, and possible consequences of the increasing presence of wolves.

Keywords: Wolf (*Canis lupus*), Multi-criteria Decision Analysis, Pragmatism, Reasonable Valuation, Environmental Education

1 Wolf in Finland

Finland's wolf (*Canis lupus*) population is increasing, and it is expanding to the west. The growing presence of the wolf has sparked a public discussion in Finland, especially in Satakunta, SW-Finland. The wolf enjoys strict protection under the European Union Habitats Directive. Annex IV species are all covered by strict protection. One of the main objectives of Finnish wolf policy is an even geographical spread of wolves (Anon., 2005). As the number of wolf observations has increased, people living in remote areas have started feeling fearful about school journeys, and are concerned about the loss of cattle and dogs.

Finland's general policy on large carnivores, and especially its wolf policy, has met a great deal of criticism from the European Commission ever since Finland joined the European Union. Consequently, the Finnish Hunting Decree was revised in the autumn of 2008. As wolf hunting has become more controlled and difficult over recent years, sentiments of frustration, concern and fear have increased among people living in the remote parts of the countryside. The wolf population retracted significantly in the Kainuu region of NE Finland during the winter of 2007-2008, and it is believed that this was at least partly due to the EU pressure on Finland and its local implications: angered local actors and presumably increased poaching in the area.

Whenever the Ministry of Agriculture and Forestry has received any criticism, it has always referred to the Management plan for the wolf population, published in 2005 (Anon., 2005). The plan consolidates the international, EU and local objectives and requirements into one

plan of action. In addition, in order to improve the dialogue between different interest groups and authorities, semi-informal regional advisory committees on large carnivores have been established on some regions in Finland. These type of forums have no formal remit, but it seems that by convention their tasks have been to increase interactions between different interest groups, offer a platform for the exchange of ideas, views and information, help gauge the information needs regarding large carnivores, manage the dissemination of regional information on large carnivores to the public, and assess different options and strategic possibilities to do with large carnivores policies (see, e.g. Pellikka et al., 2008).

In Satakunta, there have been discussions on the establishment in 2009 of a forum on large carnivores, and initial contacts have been sought. The forum should now gather together relevant interest groups to discuss the wolf protection situation, the spread of wolves in the west, its implications on well-being and the ways in which the negative effects can be diminished and the positive ones strengthened. Expectations are high. The forum must find a way to combine different perspectives and come up with a shared goal and detailed principles based on which the wolf population and the effects it brings will be managed in Satakunta.

This paper aims to explain the work carried out on a Turku University course, Introduction to Environmental Economics, on which my students and I attempted to add and create content through the process of reasonable valuation. The students worked either independently, or in groups of two or three, writing a consultation report for the interest group of their choice about how and by which methods the wolf's effects on well-being should be analysed and valuated in the Satakunta forum on large carnivores. It was our objective to have practical

influence on the work of the Satakunta Forum on large carnivores, to be established in late 2009. It was also my aim to add new content to the theory and practise of reasonable valuation, as introduced by John R Commons (1990).

2 The wolf's increasing presence as a phenomenon in environmental economics

Even if wolves only rarely attack dogs or cattle, or even make an appearance to humans, they have a multitude of direct and indirect effects on human well-being. Recognising and evaluating these effects is a multidisciplinary task, but most of all it falls on environmental economics to assess and give meaning to the effects on well-being of the presence of wolves. However, exactly the same effects on well-being bring the phenomenon into the domain of environmental ethics. Traditionally, these two domains have been kept separate: either the components of human well-being, or the selection of good and right actions, have been studied.

This course aims to study the two dimensions side by side. The increasing presence of wolves, wolf protection and challenges in the management of the wolf population are linked to human actions, and when the effects on well-being are evaluated against these, it will become possible to assess what the best possible course of action would be, on a case-by case basis. We did not use 'value' as a study concept, because the concept of value is fuzzy and problematic. Instead, by having a suitably concrete look at the problematics of the increasing wolf population, its effects and potential options, we can come up with a working definition in which value is constituted by two nouns: valuing and valuation.

Valuing denotes a reaction that occurs instantly and following one's disposition and preferences as a response to a real, proposed or expected change: as a result of an interruption, well-being either appears to increase or decrease. Valuing is realising how much one is willing to suffer in order to gain one's objective, to pay in order to receive the expected, or how much effort to expend to reach one's goal. Valuing sets the preference or readiness for action. Valuing means the understanding of the relative importance of the factors under scrutiny. It means relating or comparing the effects on well-being to one another using certain basic values, such as price or weight. Such a spontaneous, instant expression of valuing may acquire status as a value, if feeling is used as a meaningful structuring force in the problematic situation or as a factor in problem solving. (See more on valuing, e.g. Hanley et al., 2001; Edwards-Jones et al., 2000.)

Unlike valuing, *valuation* does not take habits or preferences as given, but the circumstances that give rise to their birth and existence are constantly being formed, lived through and thought about. Valuation aims at altering problematic circumstances (Dewey 1988a). Within the economic sciences, this definition is not conventionally used in main stream economics. Its roots lie in institutional economics and pragmatics, on which the strain of economics in question is philosophically based (Mirowski, 1987; Bromley, 2006; see also Pappas, 2008). Valuation occurs when the relationship between an individual and his or her environment changes. Valuation takes place when an individual's self-image changes, or an individual's understanding of particular circumstances changes, or when planned changes are being

implemented in external circumstances, such as how a society has organised itself for the purposes of provisioning.

A regional forum on large carnivores is a tool for both valuing and valuation, but it also serves as a pedagogic tool for policies on the environment and natural resources, with the help of which the effects on well-being caused by the growing wolf population, and the expected political implications of those effects, may be positioned at centre-stage in interactions and discussion. By operating with these two working concepts, it would afford the debate on wolf to become more reason-able. In other words, it would enable the use of reason – not only ejaculations of pure preferences or formal articulations of rational arguments – during the problematic and complex policy process. Reasonable valuation would bring various practical reasons to the fore and potentially constitute a fair and creative process of identifying, creating and selecting better practices for wolf-man transactions.

3 Wolf population development - three scenarios

Policy-making entails creating alternatives, analysing those alternatives and selecting necessary actions. This also applies to wolf policy. The well-being effects resulting from the growing wolf population must be studied through different alternatives. Finland's current wolf population management plan only really includes one policy: The wolf population in Satakunta is growing. However, how much the population will grow is out of direct political reach, as it is influenced by various social and ecological boundary conditions and special characteristics.

As there are no detailed alternatives to choose from, the growth of the wolf population may be studied through different scenarios. During the winter season of 2008-2009, there were approximately 23 wolves in Satakunta (see Figure 1). In 2001, the wolf observations were rare, there being only a few wolves (Figure 2). To be able to study the growth of the wolf population and the effects of its increased presence, it is justifiable to create three different scenarios, in which there will be 25, 75 or 125 wolves in Satakunta in the near future.

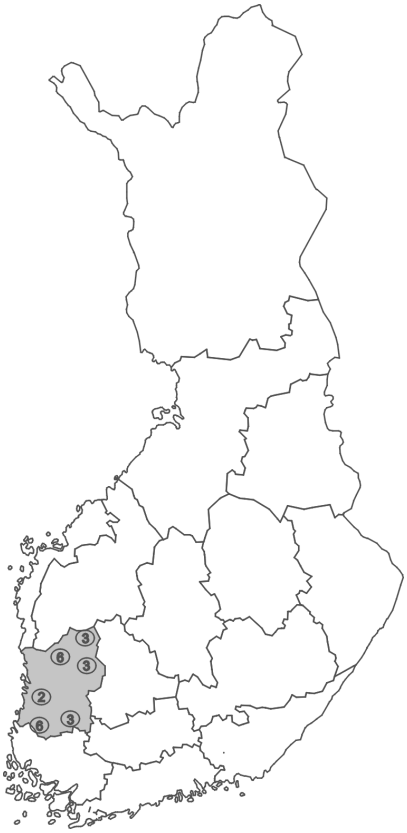

Figure 1. Wolves in Satakunta SW Finland in December 2008.

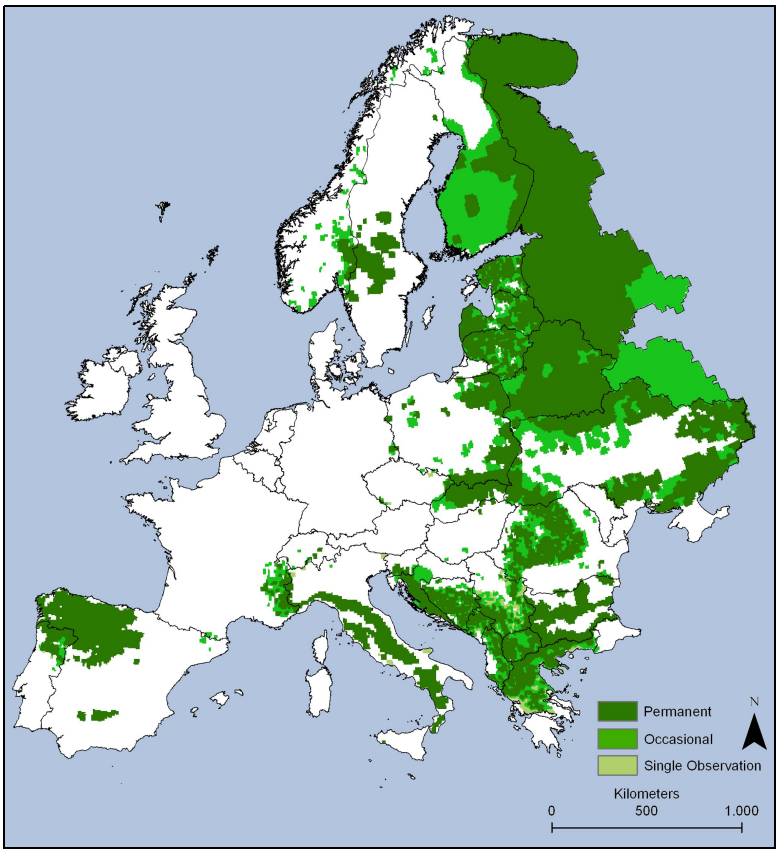

Figure 2. Wolves in Europe in 2001 (source:

http://ec.europa.eu/environment/nature/conservation/species/carnivores/)

To obtain some assistance in creating these scenarios, we looked to the area of Kainuu (NE Finland), which has the strongest wolf population in the country, approximately 70 -75 individuals in 2007. In Kainuu, a pack of five to seven wolves has a territory of about 1,000 km^2 (Härkönen, 2009). In Satakunta, moose and deer populations are larger, so it is reasonable to assume that a pack of wolves has a smaller area in Satakunta. We could assume that the wolf pack area in Satakunta would be about 500 km^2, possibly even smaller. As the whole surface area of Satakunta is 8,200 km^2, of which 65 per cent is woodlands, Satakunta

could potentially provide ecological grounds for 75 wolves, which is our scenario number two. If scenario number three became a reality, it would cause significant ecological, economic and social tensions. Even if it is highly unlikely that the wolf population would grow to 125, it is useful to include 20 wolf packs as a scenario as it will open up new discussions and outlooks into the future.

4 Multi-Criteria Decision Analysis

How can we systematically analyse the effects of the wolf's presence, when most of them are still unclear? We must analyse as closely as possible the new circumstances the three scenarios would create. The answers also raise a number of new questions. Who would be party to the scenarios? How will their lives be affected by the presence of wolves? What goals or concerns may they have? How would different scenarios affect their lives in reality? What would be the relative meaning of the effects brought about by the wolf, and would it be possible to compensate for them in any way?

Multi-criteria decision analysis offers one approach in trying to find answers to the above questions (Goodwin and Wright, 2000; Ananda and Herath, 2009). It is a tool based on decision theory, and well-suited to analysing a decision situation in an interactive, discursive and multidisciplinary manner (Munda et al., 1994; De Marchi et al., 2000; Munda, 2004; Mendoza and Prabhu, 2005. It was developed to support complex and uncertain decision situations, with an undefined group of stakeholders who may have completely contradicting objectives, concerns and solution proposals (Salgado et al., 2009). The basis for valuation is

all the more reasonable, the more systematically the instruments, means, objectives, and ends-in-view have been defined and fitted in a broader context as well as to individual lifestyles and lifeworlds (Hiedanpää and Bromley, 2002).

4.1 Decision situation

Almost anyone can take part in multi-criteria decision analysis. Usually, however, the stakeholders are selected according to their suitability or as decided by the leader of the process. There is no legal requirement to carry out a multi-criteria decision analysis. It is a voluntary process to support the planning of a project or policy, and the impact assessment. For example, in the case of Satakunta's wolf presence, the stakeholders could be as varied as a schoolchild, sheep farmer, councillor or a citizen concerned about wolf matters. On our course, we decided to select organised stakeholders in the process. The criteria for doing this were not because it was the easiest thing to do, but because we decided to follow the convention of inviting interest groups and their representatives to take part in multi-criteria decision analysis.

To begin with, we identified actors who we believed were either positively or negatively affected by the growing presence of wolves. We were able to quickly identify 64 such groups in Satakunta. Out of these, the students, either on their own or in consulting groups of two or three, selected the interest group that appealed to them the most with regards to the group's standpoint, and to whom they wished to consult on useful tools for the recognition and valuation of effects on well-being. About twenty consulting groups in all were established.

The situation seems to be comparable to life outside the classroom. For example, the Kainuu advisory committee (2001-2003) on large carnivores consisted of twenty stakeholder groups (Kainuun liitto, 2003).

In multi-criteria decision analysis, the decision situation is commonly arranged into a decision tree. It is always created on a case by case basis, and to be applied to a particular decision problem. Thus the students compiled their decision trees from the point of view of their chosen interest group, i.e. the consultation client. The decision tree consists of criteria, sub-criteria and alternatives (Figure 2). In the case of our course, the three different wolf scenarios were used as alternatives. Criteria consists of goals or concerns to which decision-maker is seeking to make a positive impact through solving the decision problem. In our pragmatic analysis, the sub-criteria consist of activities or practices that are affected significantly by the alternatives, different wolf population sizes.

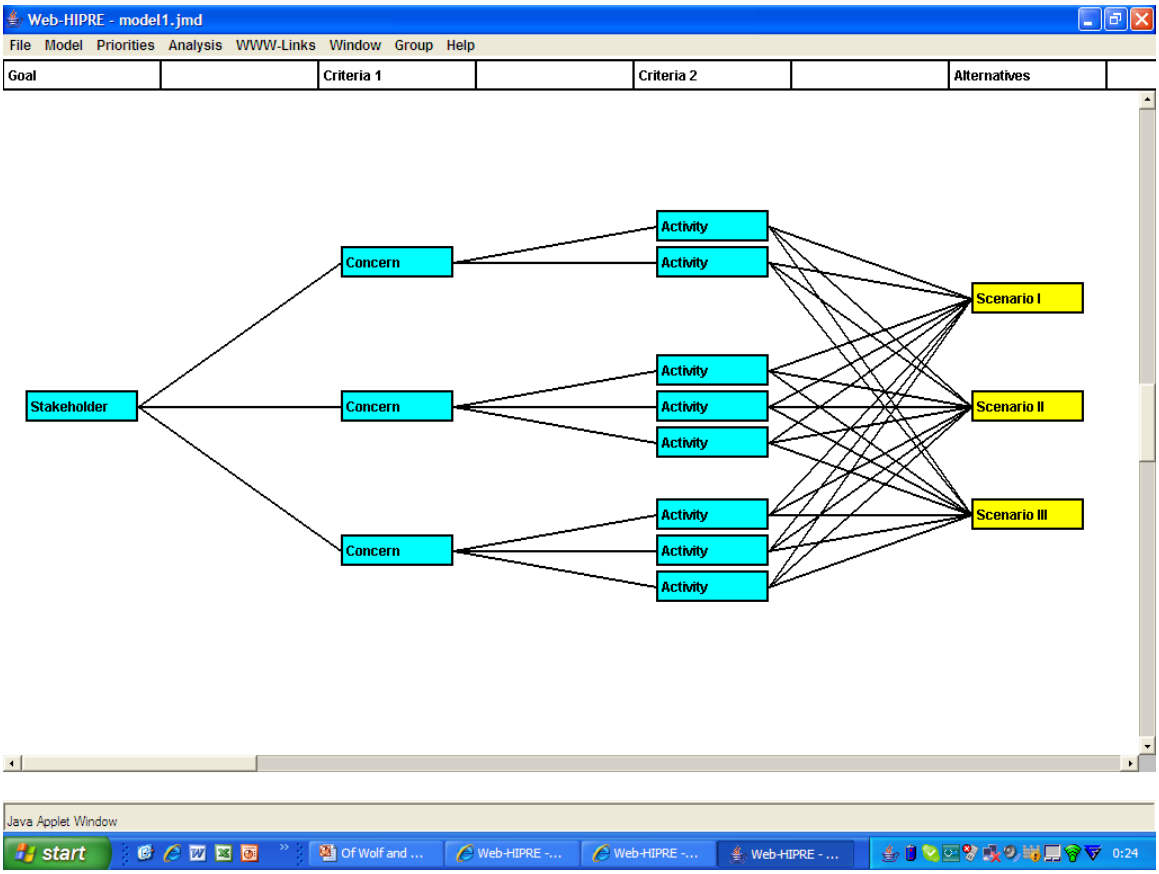

Figure 3: Decision tree model (Web-Hipre).

Normally the sub-criteria represent any measurable factors, such as species, protection areas, jobs, and so on. On our course we considered, however, that from the point of view of pragmatist environmental economics this was not sufficient, but that sub-criteria should include forms of human activity, that is, benefit streams on which different policy alternatives have different impacts. During the creation of the decision tree all of these benefit streams are made visible and intelligible. Valuation is meant to help see the benefit streams involved, and make them concrete, tangible and open for change. In multi-criteria decision analysis, each decision-maker compares the meanings of different benefit streams to one another.

4.2 Effects and comparison

In a decision situation, it is essential to understand what effects the proposed alternatives have on sub-criteria activities, what tools exist to price those effects, and in which situations and within which limits it is reasonable to use those tools. As the growing presence of wolves in Satakunta is being discussed from the point of view of environmental economics, no doubt will a member in the forum on large carnivores raise a question about the economic implications of wolves in practice. Each stakeholder has a different view, according to their own decision tree, on what actions are the most important ones in the wolf question. The economic effects on these actions may be evaluated through (i) existing markets, (ii) revealed preferences and markets, or (iii) hypothetical markets.

(i) Some effects caused by the wolf have been assigned a market value. There are protection expenses (game fences and deterrents), expenses for school journeys, expenses for compensating the loss of leisure possibilities, as people become afraid to go into the woods for recreational purposes. Almost all forms of human activity that are affected by the growing presence of wolves may be assigned a market value. Whether these are included in the personal assessments of one's well-being is up to each actor. However, most entities that can be assigned a market value are rarely of a purely private nature, as they have social (shared among people) or cultural value and are tied to communal conventions, such as the aforementioned school journeys and protection (Edwards-Jones et al., 2000.)

(ii) Factors on revealed preferences and markets have an impact on human behaviour, although these factors are never really directly compared or assessed on the markets. These kinds of factors are, for example, the impact of the wolf's presence on property prices, or the real cost of travel to a wolf observation site. When the real or assumed market costs and benefits are analysed, it is possible to find out, or at least assess, what direct and indirect economic effects on well-being the wolf's presence could have according to the three different scenarios. (Pearce and Moran, 1994.)

(iii) Hypothetical markets may also be used for the analysis of the level of effects on well-being (Jacobsson and Dragun, 1996). For instance, if the growth in the wolf population increases well-being, it is possible to conduct a survey into 'willingness to pay' (tax, fees, etc.) and find out how much an individual or a group of people might be willing to pay for the wolf population to grow to 75 or 125 animals in Satakunta. Alternatively, if the growth in the wolf population is seen to decrease well-being, it is possible to ask how much compensation an interest group should be awarded for to accept the growth (for him or her to experience that the level of well-being remains constant). Hypothetical markets allow us to assess the economic value of factors that are not normally priced on normal markets, such as the existence value of wolf or its ecological significance. Hypothetical market conditions allow for us to study valuations from the points of view of an individual or a group of people. There has been pronounced interest in the latter in recent years. (Spash, 2008.)

As effects on activities are valued, the branches of decision tree need to be valued, i.e. weighed and compared as well. John O'Neill (1993) has identified four ways in which

meaning and value of different entities or effects may relate to or compare against one another. First, entities may have a strong commensurability, and then they can be evaluated using a relative (cardinal) scale. In such case it is assumed that there exists a super value, for example, money or a weight unit, that makes comparison possible. Second, entities can have a weak commensurability or have a strong comparability, if they can only be grouped in an ordinal scale, not a relative scale. In such case, also, there is a common value, for example beauty, that enables their comparison. Third, entities can have a weak comparability. In such case, it is possible just to say that X is more valuable than Y on certain grounds. And fourth, it may be totally impossible to compare entities at all.

In multi-criteria decision analysis, the first three are possible, but the fourth one can never be accepted (Martinez-Alier et al., 1998). Using a Web-based Web-Hipre application, for example, criteria and sub-criteria may be compared to one another by, for instance, assigning the least important criterion the value of ten, the second most important criterion over ten, and the third most important criterion a bigger value than the second one, and so on. This valuing method is called Smart. It is also possible to assign the most important criterion the value of 100, the second most important under 100, and the third one a value less than the second one. This method is called Swing. The third option (Smarter) is simply to arrange entities in an order of importance. Web-Hipre scales the replies so that weight values' sum is one (1). The comparison of goodness of alternatives in relation to activities is done on a cardinal scale, which can either be direct or based on analytic hierarchy process (AHP). (Mustajoki et al., 2004.)

Multi-criteria decision analysis performs a "double valuing", first of all by costing the effects on actions, and then comparing the branches of the decision tree and all of its elements to one another. Despite this, multi-criteria decision analysis as a whole is not just a simple calculation of advantages and disadvantages (Martinez-Alier et al., 1999). In identifying the decision situation and drafting the decision tree, we create valuations and identify institutional circumstances, and establish platforms for discussing and changing them. On our course, we did not assume that the evaluation stakeholders or their representatives would compare and value entities solely according to the ethics of rational economics (even if it is one of the central theoretical understandings about human beings both in multi-criteria decision analysis and main stream economics), instead we assumed them to be actors or participants in a drama, which they write and rewrite as the process develops. Participation is a way of producing, using and moulding information, knowledge, and reality (Andersson, 2006).

5 Dramatic rehearsal

In multi-criteria decision analysis, we need to define a situation, then presume, define and assess the impacts of different alternatives, and, even in advance, try to get a feel of how significant these effects may be. We must also allow emotions and considerations to come into the decision of which alternatives and objectives are deemed to be the most reasonable in a given situation. The philosopher, John Dewey (1988b/1922), has called this assessment process a 'dramatic rehearsal'. It is a process in which the actor must in an unexpected situation face his or her usual thought processes and habits, self-criticism or criticism from

others, the predicted effects of certain actions, and then assess the suitability of these for the circumstances that follow valuation.

The tool used in dramatic rehearsal is imagination. Imagination is also required in the creation of a decision tree and recognition of the decision situation. It is much needed especially in classrooms, because without precise information or understanding of particular situations, the students must be able to perceive the effects, their objects and meanings of a growing wolf population. On their own and as part of the group, the students must imagine both themselves and the wolves living in Satakunta. Use of imagination is not arbitrary, but entails a combination of emotion and reason. John Dewey has come up with a fitting definition of the combination of emotion and reason used in dramatic rehearsal. According to him (1988, 139): ”We do not act *from* reasoning; but reasoning puts before us objects which are not directly or sensibly present, so that we may then react directly to these objects, with aversion, attraction, indifference or attachment, precisely as we would to the same objects if they were physically present.”

In this way, the multi-criteria decision analysis, with its systematic problem analysis, decision tree and discussions, helps create a common, shared space in which different emotions and cognitive elements are distributed and present. Dramatic rehearsal may be used in three different ways during a multi-criteria decision analysis: social, personal and public. It is social when a decision tree is being created in a large group. It is personal during the actual analysis stage. It is public when it is brought up to the forum level. Dramatic rehearsal will

always have an impact on scripting the process. (On distributed cognition, see e.g. Clark, 1997; on dramaturgy, see e.g. Hajer, 2005.)

5.1 Affects

What are affects? According to David Hume, reason is enslaved by passions; in other words, reason accepts goals as given and tries to find the best means for obtaining them. Aristotle also believed that reasoning is limited to means. Charles Peirce (1997), however, linked purpose and emotions. According to him, change begins with an interruption, and a situation assessment is based on an experiential emotion and an understanding of the admired, ultimate goal. Emotions let us feel when admired is constituent in action and its consequences. For example, the unexpected growth of the wolf population has caused a new situation in Satakunta, which requires actors to reassess their well-being and possibly change their preferences, understanding or external circumstances. This disturbed situation gives rise to affects, i.e. emotions, which will map out the probability space and guide reasoning to assess the current ends and activities, in order that the actions can start producing the desired effects again (Dewey, 1988b; Damasio, 2000).

Affects help reason to activate and assess the situation. The German sociologist Max Weber believed that affectional rationality forms the basis for all means and end considerations (Elster, 2001). Thus in creating decision trees, not only is it important to assess the means (decision tree activities) and ends (decision tree goals and alternatives), but it is also essential to map the emotions that give rise to means and ends. Pedagogically thinking, this, of course,

applies to both classroom situations as well as real policy situations: by affectual engagement, the understanding of a situation, ways of feeling and the admired become stronger.

How can we discover emotions, their circumstantial variations and strengths? Emotions must be enticed out. There many ways to entice emotions. In our case it was writing, and we can use either reactive or active writing to this end. Reactive writing is a reaction to a challenge or problem. Active writing has a neutral starting point, and the piece is arranged entirely by the writer. As the wolf is a very emotive topic, I decided to use the active writing method: there is no need to attempt to entice the emotions out. At the start of the first lecture, I asked the students to write a short 300-word piece on "What is the value of the wolf?" At that point, the students had no idea of my objective or the content of the course. The definition "value" was left open, up to each student to define by themselves.

I then analysed the contents of 42 pieces of writing. I thematized the pieces according to the value the wolf seemed to have been assigned. There was a large number, over eighty, of initial categories. Themes with more than ten mentions were: part of the ecosystem, fear, damages, intrinsic value, fables, and wolf protection. Themes with over eight mentions were: may kill people, threat, fine qualities of the wolf, and mysticism. I categorised these value definitions into more general categories, such as: emotions triggered by the wolf, being a wolf, the strangeness of the wolf, cultural presence of the wolf, and the multitude of circumstances.

Categories describing the value of the wolf became intertwined, for example, the affects became intertwined with morals and knowledge. There were more mentions of negative wolf emotions than positive ones - either this was the writer's own emotion, or it was believed that the general consensus was against the growing presence of the wolf than in support of it. There were twelve types of different negative wolf emotions, whereas of the positive ones there were seven. The only negative, so-called primary emotion was fear, and the rest were secondary, i.e. social emotions, such as anger, compassion, humility, and arrogance. They guide our actions in relation to other actors, and through associative reactions to prohibitions, liberties, incentives, obligations and so on. Wolf emotions map and sound the expanse of options.

The analysis of emotions brought fore by active writing or felt meanings do not directly help us create a decision tree. The emotional placement of an actor helps himself or herself and others to understand why certain goals, concerns, and activities should be included in the decision tree, and why some alternatives are eventually better than others. Emotions may express and reason what will be defined as goals and concerns, and of what these wolf goals and concerns may possibly consist. The direction and strength of affects influence the creation of the decision tree in any given situation, and especially what value and emphasis different elements may be assigned. For the students, a Multi-criteria Decision Analysis combined with a view from the dramatic rehearsal will offer a chance to position themselves in place of a group and try to understand just how a group equipped with certain goals, concerns and activities might think and act - and why.

5.2 Reasons

Affects give rise to the question “Why?” Consideration aims to restore and/or renew emotional stability. Why is this particular concern relevant (for example a fear)? Why does this particular concern (damages caused by wolves) contain these actions (sheep losses and school journeys), but not certain others (property value in remote areas)? Why do these particular alternatives (for example, 25 wolves in Satakunta) seem to work the best?

Most commonly these types of questions come up in multi-criteria decision analysis at the time of drafting the decision tree. People present usually include representatives from interest groups, specialists and a multi-criteria decision analysis specialist. Only rarely is the decision tree drafted purely by specialists. It is one of the principles of multi-criteria decision analysis that any factors regarding the decision situation structure are discussed as systematically as possible, because it depends on the truthfulness and acceptability of the decision tree structure and content as to how successful and reliable the outcome will be (see e.g. von Winterfeldt and Edwards, 1986). Giving reasons (by specialists) and asking for and giving of reasons (by negotiation) are a central part of drafting the decision tree and valuation.

Reasons do not usually receive similar attention in the valuing part of the multi-criteria decision analysis, at the time of criteria or sub-criteria being weighted. Although the above questions are laded with emotion (with fear, anger, desperation) and they demand to be measured and compared, when the first decision analyses were completed in Finland, no

reasons were discussed, and it was regarded sufficient for the stakeholders to perform just the requested weighting. Little by little more emphasis has been given to discussion, the course of discussion and its effects, and in cases where this has been followed, encouraging results have been achieved. Valuation has become more reason-sensitive (more on reason-sensitiveness see O'Neill, 1997).

What are reasons? Reasons give "why" questions "because" answers. According to John Searle (2001), there are three types of answers. First of all, facts give reasons (I carry an umbrella because it rains). Secondly, reasons can be intentional uttered states, such as desires (My desire to remain dry is the reason why I am carrying an umbrella). Thirdly, reasons can be uttered entities, such as obligations, commitments, needs and requirements (I have a need to remain dry which is the reason I am carrying an umbrella). Searle's typology may help with organising and analysing discussions during multi-criteria decision analysis. This kind of typology may be particularly useful is assessing reasons in valuing, in other words, when people are thinking about why they value certain activities in a particular way: (i) For instance, the growing wolf population is a fact, which gives me reasons for building a fence around my sheep paddock, (ii) I am building a game fence, because I want to carry on sheep breeding, and (iii) I am building a game fence because the state is obliged to subsidise part of the costs.

In my opinion, a tool better suited to valuation - i.e. identifying and changing institutional circumstances - is the typology created by the sociologist Charles Tilly (2006). He identified four types of reasons: conventions, codes, stories and technical explications. Tilly placed the

types of reasons in a table that categorises them according to their purposefulness or cause-consequence, and whether they are of a general or particular nature (figure 4).

	General	Particular
Purposefulness	Convention	Code
Cause-consequence	Story	Technical explication

Figure 4. Typology of reasons (Tilly 2006).

Conventional reasons were given throughout the course. On one hand, convention was seen to refer to a social habit or cultural tradition. On the other hand, it may refer to the conventional use of language. A convention transfers a meaning in the past into the future. For instance, the evil of the wolf and the security threat caused by it are examples of conventional grounds that the students gave, and that are being used when the effects of the presence of the wolf is discussed. The wolf is regarded dangerous to humans, even if there is no proof for it. We noticed that conventional reasons are often used to try to maintain the status quo, not to change them. Conventions give grounds for maintaining the status quo. This is why it is essential to identify and break conventional reasons so that change may occur in the prevailing circumstances.

A code provides formal reasons for actions. A code may refer to legal, religious or other sanctioned rules or settings - that is, a commonly accepted and formal rules of the game that are in force. When the European Union nature directive is mentioned in discussions about wolf protection, the reasons for action is a code. Similarly, when a lift to school is demanded

because the local authority has an obligation to provide a safe journey to school. When one becomes sensitive to it, one can distinguish a great deal of code reasons, even in a classroom environment. However, not yet there are any codes to rule the actions of the future members of the Satakunta Forum on large carnivores or codes for deciding which wolf-related impacts are significant and which are not. We noticed that codes are used in particular at the drafting stage of a decision tree. At the valuing stage, codes are only rarely used as reasons.

A story is an explanatory account about an unexpected event. It simplifies and assesses the course of events in a morally charged way, in other words it attempts to encourage thinking according to the moral of the story. A student wrote in his piece how every time she was cycling with his father and sister, she wanted to make a stop at a "certain spot at a memorial stone. These words were engraved on the stone: 'The last wolf of Harjavalta was shot here' and the date. The stone, text and environment feel frightening. Another memory is from my primary school. There was a stuffed wolf in the entrance hall. It could well have been the one that was shot last. On one hand I was afraid of it, on the other hand I wasn't (it looked so frail)". The moral of the story consists of its gender (romance, comedy, satire, tragedy) and trope. According to Hayden White (1978), the trope of the story can be metaphorical, personal to general (synecdoche), general to personal (metonym), or ironic. In the example above, the student's story was built on comedy and synecdoche: the description of events is funny (makes you laugh), and by using two examples a common emotional regime is explained. During the course several wolf stories came up. We noticed that stories are commonly used as reasons for valuing.

Technical accounts are reasons that require a particular expertise. As it is a particular aim of the multi-criteria decision analysis to combine specialist knowledge with subjective valuation, technical accounts form a very important part of the analysis. Technical explication is a practical "if, so" norm. Expertise - i.e. technical accounts - matter particularly in identifying and defining alternatives and in assessing the impacts of them on the decision tree sub-criteria. What the significance of these effects that have been assessed with expert help is, depends on the stakeholder. When we discussed the wolf population in Satakunta, a large number of technical questions came up, and we needed to consult various sources and people to find the answers to them: For example, how many wolves can Satakunta sustain? What are the financial sanctions that follow poaching? Is a wolf capable of jumping over a game fence? Will a wolf always stay away from humans? Technical accounts consist of facts. If building a game fence costs X Euros per kilometre, building one hundred extra metres will cost so and so much more. Although the students were not large carnivore specialists, they were able to come up with many reasonable explanations for effects that follow from the growth of wolf population, and the financial implications of these effects. Technical accounts have an effect on the significances at the weighting stage.

During our experiments and discussions we, indeed realized that reasons made public create a shared reality and help us to understand why some people want to have a certain future, and why these desired futures differ from one another. Our aim was to imagine and create preconditions for the future that could, potentially, be meaningful also in the real life conditions. In practice, multi-criteria decision analysis helps assess those activities and alternatives that will make for the desired or undesired future.

6 Multi-criteria decision analysis and reasonableness

Multi-criteria decision analysis as a dramatic rehearsal opens up a genuine opportunity to look at the reasonableness of the habits of thinking and acting in any given situation, in other words what the institutional circumstances are like and what changes actors wish upon them, at what cost – and, most of all, why? Multi-criteria decision analysis is not a harmless valuation and comparison exercise, because during the valuation process, while assessing problematic circumstances and the ethical and economic implications of changing them, we are already both altering and recreating the world: we are changing the current ways of thinking and acting, and trying to replace them with new beliefs and procedures. Multi-criteria decision analysis is a game of knowledge, power, and force, but the game of asking for and giving of reasons is carried out in fair and truthful manner it may also offer a place for reasonableness. This is something we noticed in the classroom, and it made us think the real situations on the outside.

It is one of the prerequisites of reasonableness to identify the prevailing institutional structures: who has a right, permission, obligation, necessity, liberty or exemption. In the classroom we tried to figure out how to grasp institutional situatedness. The simple questions are: what are the relevant benefit streams for each actor, and what is problematic with these benefit streams - and, most of all, why? Affects, actions, and reasons open up the decision situation to a critical view, after which the definition of the decision situation, checking of the

decision tree and perhaps drafting towards a shared decision tree now become actions entirely differently ethically charged from what they used to be in previous wolf policy settings.

Multi-criteria decision analysis offers individual interest groups an opportunity to assess the decision situation from their points of view, and identify advantages and disadvantages following from the growth of the wolf population that are relevant to it. They must among themselves identify goals and concerns, and imagine and assess the impacts the wolf scenarios would bring about if they became a reality. Multi-criteria decision process helps to recognise and define the group's own position, but the process also helps in developing understanding towards others by feeling and reasoning the situation through their perspective: invisible other are turned into tangible, generalized others.

It is also possible to create, test and evaluate different benefit stream constellations from the point of view of unorganised groups, i.e. civic society. Multi-criteria decision analysis or policy-making in general would not usually do this. However, interest in things such as focus group analysis has been increasing recently (Xenarios and Tziritis 2007). Participants in the focus group—people of different functional groups of society—may be, for example, parents of families with three children, people who use woodlands for recreational purposes, or representatives of a professional group, and so on. Focus group discussion is based on the knowledge the participants possess. There is no need for expert knowledge as the purpose is to explore and articulate habits of feeling and habits of reasoning. We become convinced that the focus groups can produce important and critical social and cultural information for valuation, valuing, and both. (see also e.g. Vatn, 2005; Spash, 2008; Hiedanpää, 2005).

When we look at the decision situation from the viewpoint of the forum (advisory committee) on large carnivores, we are faced with different challenges. On our course we concluded that the identification of interest groups and functional groups and the channelling of their value propositions into multi-criteria decision analysis and the wolf policy does help policy-making, and especially, in its implementation. We did not find reasons for defining the forum's overall view – decision tree – and its priorities. Instead, we found out that what we need is a common, shared view on the institutional circumstances and effects, and understanding how affects, actions, reasons asked and given during the valuation and valuing stages actually spring out from those institutional circumstances. Multi-criteria decision analysis is better tool for discursive search for reasonability as it is for abstract consensus for rationality.

Multi-criteria decision analysis is a way of processing knowledge and producing collective understanding what seems to be the best thing to do in a given situation. We did note that the forum and multi-criteria decision analysis could, at least potentially, succeed in changing the stakeholders' attitudes and readiness for action, so that best practices - i.e. the combinations of activities and alternatives that have the most solid reasons - are distinguishable from the worse ones. Even if the forum has no formal quorum, it need not become merely an informative body on large carnivores. It may well assume a more active role. It would be enough, for example, to ensure that the forum has sufficient capacity to follow how local solutions will begin to take shape with the growing presence of the wolf, as inevitably some local practices will work better and more fairly than others. Lack of resources need not

necessarily limit the forum's actions. Quite the contrary - it could well work as a genuine incentive in spreading responsibility and involving stakeholders in the field. Such softer, locally-led wolf policy would be very welcome in the current directive-critical atmosphere at the local level. It would encourage creating practices that incorporate both valuing and valuation into collaboration, and economics and ethics into wolf policy.

7 Conclusion

One course on environmental economics cannot provide solutions to the challenges of Finnish and European Union large carnivore policies. The course proved, however, that the described multi-criteria decision analysis as dramatic rehearsal and the use of accompanying visceral individual and group methods of enticing affects and of articulation of reasons, offer a real, if only potential, way out of the current dead-end of contradictory and scandalous large carnivore policies in Finland and Europe. As we compiled a pdf-publication of our work and distributed to the key stakeholders of forthcoming Satakunta forum on large carnivores, we hope that our course will show some pragmatic principles and direction towards reason-able valuation, i.e. for continuously identifying, creating, and selecting best existing practices for sustainable and fair wolf policies in SW Finland and outside.

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