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ANALYSIS

The edges of conflict and consensus: a case for creativity in regional forest policy in Southwest Finland

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Abstract

In this paper I articulate and describe how societal systems can be meaningfully integrated into development and environmental policy planning. I contrast two cases, the planning and implementation of the Natura 2000 reserve network and the Regional Forest Programme of Southwest Finland and discuss the elements that make the former process conflictual and the latter consensual. An analogy between ecosystem health and institutional health connects the vocabulary used in this paper with the vocabulary of environmental sciences and management. I describe the constituents of institutional health and discuss their importance in affording groups and individuals with power to resist, liabilities to resilience and capacity to adapt. I conclude by presenting a case for reform in development and environmental planning.

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1. Ignored social systems

Finnish forest policy has a rather long history of neglecting the social systems within which forests and forest practices occur. In principle, forest legislation in the country requires that social impacts shall be assessed together with economic and ecological impacts when forest policies are planned and initiated. In practice, however, both economic and ecological

implications are considered in great depth, whereas the only social aspects customarily weighed are the impacts upon employment, landscape, recreational uses including mushroom and berry picking, and ancient heritage (Ministry of Agriculture and Forestry, 1999).

One reason why ecological systems and ecological impact assessment have assumed greater importance than social systems and social impact assessment is that environmental planners and practitioners lack the competence to identify social systems and structures, the social implications of policy actions, and the social rules according to which these impacts come

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into being. They have a much deeper understanding of ecological systems, ecological impacts and the rules according to which these impacts are produced. This is mainly due to a longer history of environmental impact assessment (EIA), international treaties and agreements on the environment, and up-to-date practices of conservation research. Another factor that obviously comes into play is the lack of societal pressure for the meaningful integration of social systems and social impacts into forest planning. As it is, ecological impacts are brought into the public consciousness by the various activities of environmental organizations and movements.

The absence of societal systems in development and environmental planning has its consequences. Most importantly, the planning processes have remained socially innocent and shallow. This state of the art motivates my work. The purpose of this paper is to suggest how planning, valuation and decision-making can learn from scientific and practical experience on incorporating ecological structures, functions and dynamics into environmental planning and impact assessment. The aim is to see how social systems, social diversity and social impacts can be made more understandable, tangible and manageable in the context of regional forest planning in SW Finland.

The paper builds upon old institutional economics and ecological economics, and it proceeds in the following way. First, I introduce two cases: the planning of the Regional Forest Programme of SW Finland and the planning and implementation of the Natura 2000 Reserve Network. Second, I describe an analogy between ecological health and institutional health. Third, I discuss some aspects of social emotions and individual action tendencies as surrogates for institutional health. Fourth, I explore the significance of functional groups in maintaining institutional environment healthy. Fifth, I connect the analysis with a transactive approach to participatory and collaborative planning and decision-making.

2. Materials and methods

Over the past 5 years a number of regional forest-related environmental and developmental planning processes aimed at integrating economic activities,

environmental concerns and social dimensions of development have taken place in SW Finland. The purpose of these processes has also been to develop regional practices of participatory and discursive planning. My focus here is on one of these processes: the Regional Forest Programme of SW Finland.

I will contrast it with the planning and implementation of the European-wide Natura 2000 Reserve Network in SW Finland. This is motivated by the fact that the two processes offer different answers to the same timely question of how to approach economic activities, social well-being and environmental conservation. I will be trying to make understandable how one of these processes resulted in consensus and the other in conflict: what happened and what did not happen in the processes and what can we learn from these processes.

2.1. *The Natura 2000 reserve network*

The Natura 2000 reserve network is an extended, European-wide conservation network that is based on the [Birds Protection Directive \(79/409/EEC\)](#) and the [Habitats Directive \(92/43/EEC\)](#). Natura 2000 is based on a EU directive and therefore it has to be integrated into national legislation. Planning got under way in 1995 and implementation in 1997. The aim is to create a coherent network of different habitat types throughout Europe by the year 2007.

Natura 2000 imposes new formal restrictions upon local and regional land and resource use within certain ecologically significant areas. The seeds of doubt and dispute were planted already in the very beginning of the creation of the Natura 2000 network because of the lack of participation of landowner interest groups during the preparation of the Habitats directive. The environmental non-governmental organizations, on the other hand, had a significant influence of the drafting the directive ([Weber and Christopherson, 2002](#); [Paavola, 2003](#)). In Finland, planning for Natura 2000 was in principle a collaborative process. However the collaboration only involved national level interest groups and organizations; regional and local interest groups remained absent. No arrangements were made for public involvement. Partly for this reason the process prompted a huge reaction, including almost 15,000 letters of appeal nationwide. More importantly, from my point of view, it gave rise to

strong local and regional resistance to environmental conservation in SW Finland. Namely, in the early autumn of 1997, four landowners from Karvia went on hunger strike in protest against proposals for the inclusion of certain areas in the Natura 2000 network.

In winter 1998–1999 I studied this grassroots resistance that evolved in the rural municipality of Karvia in SW Finland in response to the introduction and implementation of the Natura areas. I focused on two aspects of the individual and social conditions of resistance: the structural and functional features of local forestry, and the social emotions affecting the behaviours and decisions of forest owners and other people working within the local forestry sector (Hiedanpää, 2002).

2.2. *The Regional Forest Programme*

The Regional Forest Programmes were initially set up in response to renewed forest legislation in 1997 when two important new acts take effect. The first of the acts, i.e. the [Forest Act \(1093/1996\)](#), broadly outlines how Finnish forestry ought to be practised and how the forest administration shall be organised at the regional and local level. The other, the [Act on Financing Sustainable Forestry \(1094/1996\)](#) states how forestry that is economically, socially and ecologically sustainable shall be financed.

The Forest Act requires that National and Regional Forest Programmes are in place before any new regional forest management schemes or plans may be drafted. According to the Forest Act, these Programmes must be created in a bottom-up process, which in practice means that the National Programme is an aggregation of the results of 13 Regional Forest Programmes. The Regional Forest Programme of SW Finland was organized in two phases, viz. in 1997–1998 ([Regional Forest Centre of SW Finland, 1998](#)) and then in 2000–2001 ([Regional Forest Centre of SW Finland, 2001](#)). The interim period between these two phases saw the completion of the National Forest Programme ([Ministry of Agriculture and Forestry, 1999](#)). The second regional process calibrated the regional goals and informal requirements with the national ones.

The purpose of the Regional Forest Programme was to draw up a strategic plan for regional forestry for 2001–2005, with special reference to economic,

social and ecological needs and objectives. It did not introduce formal restrictions into regional forest economy, but instead tried to influence forestry from within by bringing it more closely in line with the ideology of multiple use forestry. The purpose was to identify factors hindering the development and attainment of economic, social and environmental goals. This was no modest challenge: SW Finland has some 1.7 million hectares of forest, of which 64% is available for exploitation. Four-fifths or 81% of the forest land is privately owned.

The Regional Forest Programme involved a total of 21 regionally important interest groups.¹ To meet the requirements of stakeholder cooperation and communication, a steering group and two regional working groups were established. One of the working groups focused on forest economy, the other on environmental issues. I took part in the forestry group, which met on 10 occasions. The purpose was to discuss multiple ends, means and tools present in regional forestry and in management planning. The process led to the unanimous creation of the Regional Forest Programme of SW Finland.

2.3. *Research approach*

I have applied what Charles Sanders Peirce and his followers call abduction ([Bromley, 2004](#); [Samuels, 2000](#)). This is an approach which begins with a (surprising) result, proceeds to rules and regularities that brought the result about, and concludes with a case for reform. A deductive process, by contrast, goes the other way round: it starts with the case,

¹ The steering group consisted of following interest groups: Regional Forest Centre of SW Finland, the Forest-Owner's Association of West Finland, UPM-Kymmene, Metsäliitto, the Machine-Entrepreneur's Association of Satakunta, Regional Environmental Centre of SW Finland, the Nature Conservation District of SW Finland, the Nature Conservation District of Satakunta, Employment and Economic Development Centre of Satakunta, Employment and Economic Development Centre of SW Finland, the Finnish Forest and Park Service, Regional Council of Satakunta, Game Management Association of Satakunta, Game Management Association of Varsinais-Suomi, Forest Research Institute (Parkano Research Station), Countryside College of SW Finland, Forest College of Pori, The Wood and Allied Workers Union, University of Turku (Satakunta Environmental Research Institute), Forest-Owners of Satakunta, Ministry of Defence.

proceeds to applicability axioms and hypotheses (i.e. rules and regularities) and concludes with the results. Deduction sustains the theoretical core ideals and the assumption of a particular social practice. Abduction, on the other hand, is both a critical and creative process. It invites consideration of emotional regimes, purposes, and working rules and principles of collective action that made the surprising results possible (Commons, 1990, pp. 732–741).

In this case of mine, the surprise was the co-existence of conflict and consensus in regional forest economy. How, then, did conflict and consensus co-exist? Following the method of abduction, I can only make informed guesses at this stage. Perhaps the social consequences were different because both processes tried to influence different factors that were causing friction to the development of environmentally sound forestry. Perhaps it had to do with the fact that one of the processes was planned and run by environmental authorities and the other by forest authorities. Perhaps these social avalanches that were caused by Natura 2000—which started first—taught a lesson to the planning of the Regional Forest Programme. Perhaps Natura 2000 affected the rules of the game of regional forest economy from outside and the Regional Forest Programme from within. Once the process of abduction has reached its conclusion, perhaps one of the above hypotheses will have emerged as the most reasonable and robust one—but it is equally possible that the answer has ingredients from all of them.

In my search for a diagnosis, abduction put me into three different positions as a researcher. I have been an observer, a participant and a reformer.

As an observer, I have engaged in three local and regional forestry related development and environmental planning and valuation processes. During the early stage of research in 1995–1996, I had an office at the Regional Forest Centre of SW Finland, which is responsible of regional forest planning. The Natura related observation took place during a period of few weeks when I lived in Karvia in early 1999. I conducted semi-structured focused interviews with a total of 10 forest owners and forest practitioners. I exercised what I call emotional role taking. I gathered experience-based understanding about social structures, forces and dynamics effective in planning situations in an attempt to understand why people

were claiming what they were claiming and why they were acting as they were acting. My research position was built upon a first person perspective, i.e. subjective presence within the given conditions.

As a participant, I put myself into an active role in the planning processes. I took part in a game of asking for and giving reasons for and against hoped results and anticipated side effects of particular collective actions (Brandom, 1994). I call my activity strategic role-playing. My purpose was to interpret rules and regularities that were conditioning what the groups were aiming at and what means they considered the most appropriate in this. My focus was on the claims for and against certain ends and means. This research position may be called a second person perspective: it is based upon inter-subjectivity in interpreting the reasons for motives, desires and preferences.

As a reformer, my aim has been to find and create practical tools for social criticism against current governance of regional forest economy. This is a task of finding and making. Since the conceptual and practical possibilities are already there, the task is to find the most appropriate ones, to articulate them and give reasons for their use. Therefore, the purpose of criticism is to help the regional forest economy to identify, articulate and select the most reasonable existing productive practices. This calls for a third person perspective: that is, an outsider's perspective upon ongoing transactions.²

3. Conflict and consensus at the edge of collective action

Natura 2000 changed certain rules of the game of regional forest economy. Its purpose was to re-frame and reorganize the space of productive practices of regional forestry by bringing in new formal con-

² There are two critical aspects of my work: objectivity of research and my effectiveness as a reformer. Critical literature on action research is extensive (e.g. Brown and Jones, 2001). I have not been separate from my research object and connected to it only by Method. Instead, my habitus, intellectual tradition, purposes, and vocabulary have been constitutive to the research object and research process. This does not, however, make the research any less robust or truthful (Bernstein, 1983; Fish, 1995; Whyte, 1991). Only future developments in planning practices can reveal the possible impacts of my participatory research.

straints and obligations. As the emerging conflict indicated, national and regional governance activities did not fit in very well with the way that local and regional forest economy functioned in SW Finland (Hiedanpää, 2002). On the other hand, the purpose of the Regional Forest Programme was to identify and articulate new alternatives in an attempt to restructure and redirect the regional forest economy. It was aimed at changing working patterns from within local and regional forestry. The Programme was in much better synchrony with local life.

Natura 2000 disturbed local life, the Regional Forest Programme did not. Natura stirred up a sense of insecurity, confusion and hatred among rural landowners. But it also gave birth to local resistance and new constellations of collective action. Consensus, on the other hand, was quite a different matter. The Regional Forest Programme touched upon productive practices only marginally and paid hardly any attention at all to the conditions of local life. The main purpose of the Programme was to fulfill the requirements set out in the 1997 forest legislation and to meet the forest certification criteria. In short, it took upon itself the task of integrating ecological matters, economic efficiency and social fairness. As it is, however, consensus may well be seen as a sign of danger because something critical may remain purposefully unseen.

Neither consensus nor conflict is, in itself, a bad or a good sociopolitical condition. It all depends on how the people and the environment are affected by the consequences of consensus or conflict. What the conditions and the consequences are, is a matter for the institutions of regional forest economy.

What are institutions? According to institutional economist John R. Commons (1990), institutions are collective action in restraint, liberation and expansion of individual action. There are two kinds of collective action: organized and unorganized. The first kind of collective action comprises social entities such as families, farms, firms, associations, movements, circles, municipalities, regions, states and international communities. In other words, it comprises all those collective entities that are formally and volitionally ruled, organized and ordered with a view to fulfilling certain purposes in a network of certain productive practices. The second kind, i.e. unorganized collective action, is constituted by individual

habits, group routines, communal mores, traditions, conventions and taboos. This kind of collective action is tacit but tangible in that it is anticipatory and fulfills expectations by affording embodied and distributed knowledge, means and skills.

Regional forest economy is a complex of interacting forms of organized and unorganized collective action. The crucial question concerning the functioning and volitional adjustment of such a complex is how institutions, as multi-scale collective action, are in synchrony with one another in the production and reproduction of what they are expected to produce and reproduce. When they are in synchrony, consensus prevails, that is, various productive practices are exercised without major disturbances. When they are out of phase, there is tension and conflict, that is, the outcomes of productive practices do not satisfy the all purposes and expectations. However, total synchrony implies full order, no evolution. A total conflict implies random behaviour, no development (see Dyke, 1997; Kauffman, 1995). Therefore, a well-functioning regional forest economy resides somewhere between order and chaos—between a full conflict and numb consensus. As it is, this is where the regional forest economy of SW Finland seems to dwell.

4. Health—ecological and institutional

Abduction is a creative process of diagnosing the ill-functioning. The method forces the researcher to ask: How is it possible that the results and consequences of collective action are such and such? This is what the *Economist* (2002) asked in its leader after the assassination of Mr. Fortuyn in the Netherlands and the success of Le Pen in the French presidential elections when Europe was taken by a disturbing surprise. How sick is Europe? The answer calls for a critical interrogation of the functioning and ill-functioning of various societal systems. By necessity, it calls to the fore the question of the nature and significance of institutional health.

But what is institutional health? As Charles Peirce (1902: 286) wrote: “Nothing unknown can ever be known except through its analogy with other things known. Therefore, do not attempt to explain phenomena isolated and disconnected with common experience.” I will follow his advice and approach the

question of institutional health via the literature of neighboring environmental disciplines, ecology and that of sciences of environmental management. Namely, the concept of ecosystem health has been around for some 10 years now and all this time it has been under intensive clarification and development. The theoretical and practical interest in ecosystem health indicates that ecosystems, ecological sustainability and ecosystem management are taken seriously in development and environmental policy and management planning, at least much more so than societal systems and their functioning (Costanza et al., 1992; Rapport et al., 1998).

Ecosystems are considered healthy when their structure and functioning are sufficiently stable over time despite disturbances in species relations and fluctuations in the richness of local populations. As a management tool, ecosystem health comprises three critical aspects: resistance, resilience and adaptability. Ecosystems have a capacity to resist disturbances or to recover their typical features thereafter. Health also refers to the capacity to renew critical aspects of functioning or establish novel patterns of interactions with the environment. A healthy ecosystem is resistant, resilient and adaptable. It has continuity across multiple spatial and temporal scales. (Haila, 1998; Gunderson and Holling, 2002).

Regional forest policy does not operate with societal systems with the same kind of volitional intensity as it does with ecosystems and ecological considerations in general. This is somewhat surprising. In principle, I think, institutions of regional forest economy function in the same way as ecosystems in regional forests. A healthy institutional complex (e.g. institutions within the regional forest economy of SW Finland) has a capacity to resist an internal or external disturbance. Second, a healthy complex recovers from a disturbance. It is buffered and has degrees of freedom to search for alternative courses of action so that it can sustain its functioning. In other words, it possesses enough integrity to be resilient. Third, it has a capacity to restructure itself and alter the ways in which it transacts within the wider complex. It has a capacity to adapt.

Environmental and development planning faces the question: How to approach the disturbed or problematic organized and unorganized collective action and assess whether the institutional complex is resistant,

resilient or adaptive in a healthy or sickly way? In order to get an answer, we need to explore the anatomy and dynamics of social forces that at one point constitute the systemic stability (consensus) and then at another break it into social avalanches of various sizes (conflicts). The internal structure and dynamics of the complex gain importance in development and environmental planning.

5. Positional emotions

Both Natura 2000 and the Regional Forest Programme affected people's lives in many different ways at the time of planning and execution, both intentionally and accidentally. As it the case with any development and environmental planning process, the purpose of these two was in one way or another to restrain, liberate and expand the opportunities of individuals and groups to become engaged in certain productive practices deemed good, bad or prohibited. Therefore, both these processes affected the social positions of the people concerned. According to John R. Commons (1990), there are four basic reciprocal social positions within the institutional complex: rights, duties, privileges and no-rights.

In the case of Natura 2000, the sovereign restrained by prohibiting certain previously rightful productive practices, such as logging and forest improvement on areas new included in the preserve network. At the same time the sovereign expanded certain other fields of opportunities by introducing new environmental rights. Natura 2000 also introduced and induced formal duties to landowners. The Regional Forest Programme was a somewhat different case in that it tried to enhance the learning and internalization of certain informal moral duties of good forest practices. It worked mainly for these holding a privileged position in a regional forestry; that is, forest owners. As it is, the privileged are free to explore the space of allowed productive practices. Neither of the processes paid no attention to the people of no-right, to those who are excluded and hold no formal or informal position in a given problematic situation or in the policy process. These people of no-right include rural communities and those not owning forests.

In general, disturbed social positions can trigger two kinds of social emotions: positive and negative.

Positive emotions tend to speed up those very transactions that are causing the positive emotions. They enhance entrainment, shared understanding and strengthen feelings of trust and companionship between those who belong to the same particular we. Positive emotions are for, not against something. Negative emotions also strengthen ties within particular groups, but they are against the transactions that are causing them. They call for norms, rules, guidelines, expert systems, codes of conduct, theories, rules of inference that are needed to identify disturbances and define them as problems in need of solutions (Parkinson, 1996; Clark and Brissette, 2000; Mackie and Worth, 1991).

In particular, as a multitude of outbursts in the Natura 2000 process indicated, there were angry claims that the state authorities were in violation of existing legal and/or moral rights. The actor at whom this anger was directed was thought to have an obligation to respond (on this, see Sarbin, 1986). On the other hand, failure to fulfill a moral or legal duty may also trigger negative emotions such as guilt, regret, resentment or maliciousness (Greenspan, 1995). Indeed some forest owners expressed their regret at not having clear-cut the areas that were destined for inclusion in the Natura 2000 reserve network (Hiedanpää, 2002).

The ways in which the Regional Forest Programme challenged social positions and gave rise to social emotions was somewhat different. It attempted to strengthen the sense of moral duty with regard to formally good forestry. It did not stir up strong social emotions, negative or positive. Neutrality and tolerance on the part of landowners were expressions of a privileged social position, which understandably could have given rise to feelings of envy, hatred or compassion in neighboring social positions. But they did not. In the next section, I offer one possible answer how they did not.

6. Performance, avoidance and forbearance

The ways in which turbulences in social positions and social emotions are interdependent is an opaque area of concern. It is hard to say anything definite about the constitutive mechanisms at work. For this reason, it is more useful to look at the consequences

of these turbulences in social positions and social emotions. What happens in perturbed situations depends upon the circumstantial constellation of productive practices. Therefore, the best place to look for the consequences of turbulences is in what people are in fact doing—in how they are behaving and acting.

John R. Commons (1990) has identified three possible types of actions: performance, avoidance or forbearance. In my interpretation of Commons' thoughts, performance is an act of resistance. It goes two ways. An active performance transgresses existing normative and moral boundaries. It is mediated and fuelled by positive emotions and it aims at self-realization, self-actualization and perhaps in expansion of social position. It is a sign of increasing power and well-being. There are no examples of active performance either in Natura 2000 or in the Regional Forest Programme. A reactive performance safeguards the existing normative and/or moral boundaries. It is mediated and fuelled by negative emotions, the consequences of which are internal and external destruction. It is much easier to find examples of a reactive performance. Consider the following. When landowners learned that parts of their property would be included in the Natura 2000 network, some of them considered this an attack against their rights; they were outraged and carried out selective clear-cuttings, destroying ecological values. The hunger strike is another example of a reactive performance.

Avoidance is an act of duty, legal or moral. As an exercise of resilience, avoidance goes two ways. External avoidance is exercised willingly in order to adhere to the legal or other formal norms and rules. It is end-specific, i.e. one course of action, rather than another, is considered better and chosen in order to attain an accepted societal, communal or group-specific goal, such as sustainable regional forestry. The Regional Forest Programme tried to increase awareness of duties within formal forestry. Internal avoidance, on the other hand, is start-specific. It is constituted by personal good ends and right codes of conduct. Internal avoidance springs from an internalized moral duty to adhere to local tradition, family custom or personal habit of mind. For instance, in relation to Natura 2000, some landowners did not destroy any ecological values on their property while their neighbors did. There are many reasons for

avoidance, but some of these people showed concern about their children or future generations in general, while others acted for other reasons. The Regional Forest Programme of SW Finland tried to influence these moral reasons, but had limited success.

Forbearance is a limited exercise of one's possible moral, physical and economic power. It is a reasonable exercise of performance and avoidance (Commons, 1990; Connolly, 1999). Those who forbear are willing to engage in and contribute to the development of situation in question, they are willing to adapt with changing environmental conditions. Forbearance entails a functioning social network of interactions and transactions because it is possible only in the presence of trust, confidence, reciprocity, truthfulness, caring and other constituents of social capital. This is not all, however. Forbearance requires sensitivity and critical responsiveness to the immunity of the privileged and the lack of power of the excluded. For this reason, forbearance is a rare act in actual development and environmental planning, in SW Finland for example. It seems that regional forest economy had enough social capital, but sadly the Regional Forest Programme lacked the sensitivity and critical responsiveness towards those who are beyond the formal surface of regional forestry. The Natura 2000 process in SW Finland lacked most of the social capital and all of the sensitivity and critical responsiveness.

7. Functional groups

People's action tendencies are constituted by formal and informal institutions. People perform, avoid and forbear circumstantially. From whichever social position actions are taken, they always have consequences. Sometimes activities and their consequences go with the flow, but occasionally the consequences disturb the established forms of collective life like social avalanches. It seems that the Regional Forest Programme is an example of the first and Natura 2000 of the latter.

The sciences of complexity have suggested that not only the diversity of local populations (species), but perhaps more so the diversity of so-called functional groups is crucial to the resistance, resilience and adaptability of any complex system. Functional groups are clusters of local populations

that have a similar function in the complex system in question. Functions, on the other hand, are unintended consequences of previous transactions that have established themselves and become constitutive patterns of unorganized collective action. This applies to both natural and societal systems (Luhmann, 1995; Vromen, 1995).

The general significance of functional groups is becoming clearer and more convincing. Simon Levin (1999) has recently argued that the more diverse the functional groups within the complex, the more buffered the complex is against perturbations. The more there are groups that sustain the same function, the more securely the system will maintain that specific functioning despite the disturbance. If the analogy between ecosystem health and institutional health holds and if the research on the significance of functional groups to systemic resistance, resilience and adaptability is robust (Kinzig et al., 2002), then the more diverse organized and unorganized collective action that sustains and enhances certain functions, the more buffered the whole institutional complex is to perturbation. The less diverse the set of groups that sustains a particular function, the more susceptible the complex to negative environmental disturbances and to poor policy measures.

Let me proceed now to examine the nature and significance of functional groups and discuss this issue in relation to the regional forest economy of SW Finland, to two planning processes in particular. Since the functional groups have not been identified before, there is a sorry element of speculation. However, I apply a tripartite scheme and introduce three functional groups that I have identified while observing and participating in regional planning processes. There are interpretative, identity and selective functional groups.

7.1. Interpretative groups

There are three interpretation-related functions and functional groups that concern environmental disturbances: those groups that have similar functions in producing environmental disturbances, those that have a similar function in defining disruption as a problem, and those that offer similar solutions and alternative courses of action. The identification of these functional groups is helpful in the articulation

and signification of what is disturbing in a given situation. (On interpretative groups and communities, see Fish, 1989).

The source of the disturbances tackled by the Regional Forest Programme consisted of a multitude of productive practices and the groups exercising them. This was because the disturbances identified were the side effects or other types of unintended consequences of normal, allowed forest practices. During the process there was only one group, i.e. an environmental interest group that tried to argue that some of these disturbances may in fact be regarded as environmental problems. For instance, the short rotation period in timber-based forestry (disturbance) prevents forests from growing old, from becoming old-growth forests (problem). Because there were no problematic disturbances, there was also no need for solutions. The situation was understood, interpreted and felt in a similar way by the different organized actors.

Natura 2000 was a very different sort of process with regard to interpretative functional groups. There was only one source of disturbance, i.e. the state authorities' planning and implementation procedure. Many regional and local groups considered this disturbance a problem because many of their existing rights and privileges were being challenged and converted into duties and no-rights. Many groups offered their solutions to the problem, which was that the environmental authorities must improve their economic, social and environmental planning. The problem thus was a specific procedure behind Natura 2000, not so much the purpose of the project itself. The situation was understood, interpreted and felt in a similar way by all the organized actors—with the exception of the environmental authorities.

7.2. *Identity groups*

In this case, groups are clustered on the basis of their function in the formation, preservation and enhancement of social identity. There are three identity-related functions and functional groups: first, groups that have the same function in producing and maintaining ontological security; second, groups that function in the same way in the creation of practices of liberty; and third, groups that function in the same way in constructing enabling structures for the

people. The identification of these functional groups is helpful in the articulation and signification of what is disturbed. (On ontological security, see Giddens, 1990, identities and liberties, see Connolly, 1991, and functionalities and enabling structures, see Sen, 2001).

Because it did not disturb prevailing communal and regional traditions and customs, the Regional Forest Programme of SW Finland had only limited effects on ontological security. Its purpose was to increase opportunities for practices of liberty for many “general others”, such as landowners, recreationists and environmentalists. For instance, landowners may, in principle, insist upon the implementation of a forest plan that emphasizes ecological goods and services instead of commercial timber production. Although the Programme attempted, it had little success in constructing true enabling structures. As it is, allowing opportunities (liberties) is not the same thing as creating enabling structures (freedoms). The Regional Forest Programme did not make very much headway in terms of improving people's social positions, though it did not worsen them either.

The Natura 2000 process affected the ontological security of large numbers of people because it challenged existing customs of ownership and the communal tradition of self-governance. It created new opportunities for a few, mainly to “abstract others”, that is to national environmentalists rather than local or regional groups and individuals. However it also had the unintended consequence of helping to create a multitude of enabling structures for political action, with quite a number of groups and their members benefiting. However, that was not its intended purpose. Natura 2000 did not improve people's social positions. On the contrary, it increased feelings of insecurity and uncertainty among people living in the rural areas of SW Finland.

7.3. *Selective groups*

Stakeholders and other organized collective formations that have similar functions of making sure their members remain moral and law-abiding individuals and that are attracted to certain societal goals and purposes rather than others belong to same functional group. There are three functions and selection-related functional groups: first, groups that

support artificial selection; second, groups that support natural selection; and third, groups that support involution, a purposeful but spontaneous process of creating enabling structures. The identification of these functional groups is helpful in the articulation and signification of alternative courses of action concerning what to do with the disturbances. (On selection, see Hodgson, 1993; Vromen, 1995; Ansell Pearson, 1999).

In the Regional Forest Programme of SW Finland, only a few groups supported the new formal rules for the governance of regional forest economy. In other words, there were not many people who wanted to exercise artificial selection in exclusion of bad forest practices. Many groups seemed to support natural selection in making their decision between good forest practices and bad. Accordingly, forestry would be better off if it followed soft rules and guidelines without active surveillance and threat of punishment because people learn how to pick out the good practices from bad ones by using their rationality, imitation other's actions or by trial and error procedure. Only a few groups supported involution apparently because they did not know how to provide workable, spontaneous and creative conditions for such a process to be fair and effective. Involution takes place when novel possibilities emerge from formal and informal collective action.

In the Natura 2000 process artificial selection was supported by one cluster of groups, namely the state and regional environmental agencies and activists. Areas that according to EU criteria have ecological significance are best excluded from the practices of commercial forestry and brought into the realm of nature conservation, either left intact or managed in keeping with the authorities' guidelines. Many groups supported governance-free processes of natural selection because these processes seemed to be the only way to oppose the EU and state driven official arguments and commandments. If only there had been wider awareness of the process of involution as an approach in planning, it would certainly have drawn more interest groups and stakeholders behind it. As a process of selection, it requires all the virtues of participatory, discursive and deliberative planning—in other words, involution calls for the approach known as transactive planning.

8. The structure of creativity

As a pragmatist, I will conclude my study with a case for reform. I suggest one way of volitionally maintaining and enhancing the health of regional development and environmental planning apparatuses. For this task I suggest the approach of transactive planning (Friedmann, 1973; Hiedanpää, 2002, 2004).

Transactive planning is an approach that makes active use of organized collective action and its rules. This means that the transactive planning process builds upon stakeholder cooperation and public participation. It also implies that the process articulates formal institutions—rules of the groups, laws, treaties, agreements, etc.—in a given situation. What is more, it attempts to unmask unorganized collective action, such as routines, habits, customs that at once are making the planning, valuation and decision-making easier and harder: easier because informal institutions are what we do, spontaneously; and harder because it is very difficult to make informal institutions matter, in an articulate form. The approach of transactive planning deliberates, discusses and labors on the interface of formal and informal, purposes and functions, articulated and silence, results and consequences of planned activities.

I suggest something along the following lines. Healthy environmental and development policy planning has three interdependent plateaus. First, there is a collective assemblage that comprises all the loosely or tightly organized actors affected by the disturbances or planning activities. Second, there are problem-oriented working groups and function-specific working groups. And third, there are workshops for the public.

8.1. *Collective assemblage*

All interest groups and other relevant stakeholders are invited to participate in a planning process. The whole constituted is called a collective assemblage (Connolly, 1995; Hiedanpää and Bromley, 2002), which is organized as a soft assembly (Clark, 1999). It is softly organized because it must be possible to remove organized collective actors from the assemblage and add new ones if necessary. This is also how the Regional Forest Programme of SW Finland was structured and organized.

The Programme did not however pay much attention to further nuances an effective collaboration requires. Namely, the primary task of the collective assemblage is to create a map of productive practices that are either disturbing or disturbed, to deliberate upon problems and alternative courses of action, to weigh possible impacts and select the best existing set of practices. It is in charge, but it does not do all the work alone. The collective assemblage makes use of working groups and workshops. One of the tasks of a collective assemblage is to organize problem-oriented and function-specific working groups and to set out their general working principles. It is also responsible for arranging workshops for the public.

8.2. *Working groups*

Normally, a collective assemblage is too extensive to be workable in a fine-grained problem identification, articulation and solving. The assemblage will work best if divided into problem-oriented and function-specific working groups. The number of working groups depends on the number or seriousness of the disturbances or on the scale of the planning process.

The problem-oriented task of working groups is to identify the interdependence of productive practices and disturbances and articulate the problems. Working groups identify limiting factors that hinder the fulfillment of articulated purposes of specific organized collective actors or regional forestry economy as a whole. And in order to get this done they need to bring forth norms and other formal written rules, such as laws, guidelines, agreements, contracts, procedures that are effective in a disturbed situation. Working groups frame and stake out the boundaries of the space of possible problem solutions and therefore also the set of alternative courses of action. For the same reasons, these groups also articulate and define the principles and procedures for the assessment of economic, social, ecological and institutional impacts.

All this comes together. Working groups come up with articulations and arguments concerning the nature and significance of the impacts of alternative courses of action on social positions—that is, on rights, duties, privileges and no-rights. And in the process of trying to make sense of this, they also

come to tackle echoing impacts on productive practices—that is, impacts on security, conformity, liberty and exposure. And furthermore, they also have to articulate reasons and arguments concerning the potential and possible cumulative impacts on the dynamics of the disturbed situation—that is, on powers, liabilities, immunities and no-powers. And this is the information that problem-oriented working groups have to feed back into the collective assemblage. Still, the preparation of both the Regional Forest Programme and Natura 2000 lacked the deeper sensitivity for social systems and their functional importance.

The other aspect of working groups is function-specificity. Function-specific working groups operate differently, even though they may be made up by the same groups. They spot significant functions. In other words, these working groups are concerned to ask, what is the history of the present? Function-specific working groups identify and articulate the conditions of multilevel stability in a given complex, the regional forest economy, for instance. They unmask the patterns of contingently significant unorganized collective action, such as taboos, traditions, conventions, customs, organizational routines and individual habits of mind. Working groups explore the nature and significance of various functional groups in a disturbing situation. Still, the preparation of both the Regional Forest Programme and Natura 2000 lacked the historical sensitivity for current functions, functional groups, and stakeholders—that is, for unorganized and organized collective action in general.

8.3. *Public workshops*

Every result that is produced in working groups is put to the test in public workshops. Workshops are laboratories that test the interdependence of the people and disturbances, problems and alternative courses of action. They are enabling structures for the general public, instruments with which they can have a practical impact on the practice of development and environmental planning, valuation and decision-making. (A closely related view to this, see [Forester, 1999](#)).

A workshop is a process of involution. Workshops bring to the fore the disturbances, defined problems and productive practices causing disturbances and

problems. Within workshops interests and needs are discussed, alternative courses of action are identified and agreed upon, and institutional impacts are identified, discussed and deliberated. Workshops try to anticipate social emotions, tendencies and motivations for active and reactive performance, internal and external avoidance, and also map the general conditions for forbearance. All this is aimed at assessing the conditions of acceptance and acceptability of different courses of action. These workshops are end-specific. They try to frame the conditions for choosing the best set of productive practices. Still, workshops for the public were not arranged during the planning processes for the Regional Forest Programme of SW Finland or Natura 2000. Processes did not take into consideration the public—their lifeworlds, social environments, feelings, or willingness to act one way or another. Both processes lacked the social realm of local communities altogether.

8.4. *Collective assemblage, again*

The collective assemblage is fuelled by the results and consequences of the processes of working groups and workshops. It re-reflects its focus, updates the map of disturbed and disturbing productive practices and reformulates the alternative courses of action. Collective assemblage deliberates upon the role and the significance of the organized collective actors within the different interpretative functional groups in the situation, the role and significance of identity groups in changing institutional conditions, especially in relation to social emotions and conditions of performance, avoidance and forbearance, and last but not least the role and significance of selective functional groups in the development of the situation and in ongoing processes of planning, valuation and decision-making. And after all this deliberation, the collective assemblage decides—in an open, acceptable and reasonable manner.

9. Conclusion

Now, having done all this, I am ready to suggest that a transactive approach—that is, a participatory, discursive, engagingly organized, sensitively operated, and decisively powerful approach—can make a

difference. It helps incorporate aspects of social systems and social impact into regional forest and environmental planning, such as the Regional Forest Programme of SW Finland and the regional planning and implementation of the Natura 2000 network. The benefits of the transactive approach outlined in this paper are summarized here.

In order to understand social systems, diversity of collective action must be faced and tackled. As this paper shows, the organized and unorganized collective action is the very context in which the regional environmental and forest planning is embedded. It is therefore essential to identify, articulate and signify collective action. The process is also essential because norms, programmes, guidelines, traditions, customs and habits of mind are always both the source of and the solution to the problems. The outcome of planning is always healthier, if planning process can trust its “gut reasons” to reveal which alternative courses of policy action and procedures are good, right and appropriate.

Social impact assessment is not an easy task, especially if objectives of the assessment are as challenging as this paper suggests. The identification of significant functional groups is necessary in impact assessment because the groups supporting a particular function in a particular network of actors and practices have much influence. They condition who encounters which impacts and how these impacts and their targets are taken into consideration. Being function-specific, functional groups can be identified, articulated and signified only in a collaborative problem-oriented group work. The identification of interpretative, identity and selective groups makes planning process healthier because the process deepens the understanding of the dynamics and structures of a disturbed institutional environment, for example regional forest economy.

Institutions and functional groups play an important role in a signification of stakeholder purposes and social impact of the realization of these purposes. This paper suggests that if the planning process is insensitive to organized and unorganized collective action and stakeholder view, functional groups and social emotions emerging therein, the process is unavoidably out of phase. In that case, it cannot truly explore the critical conditions that precede the desired futures and social acceptability of status quo or

introduced changes in the rules of the game. And planning that grows more aware of its conditions, becomes healthier.

This paper builds upon an analogy between social and ecological systems and suggests that if social systems are treated with the same in-depth seriousness than ecological systems, the regional forest and environmental policy planning will improve its performance. This does not suggest that planning should disregard the volitional aspects of collective and individual action. On the contrary, planning and decision-making should just become more aware of the ubiquitous effects of unorganized collective action on our lifeworlds and consequent purposes. As this paper holds, the more transactive the procedure, the more reasonable the outcome.

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References

- Ansell Pearson, K., 1999. *Germinal Life*. Routledge, London.
- Bernstein, R., 1983. *Beyond Objectivism and Relativism: Science, Hermeneutics, and Praxis*. University of Pennsylvania Press, Philadelphia.
- Birds Protection Directive (79/409/EEC).
- Brandom, R., 1994. *Making it Explicit*. Cambridge University Press, Cambridge.
- Bromley, D.W., 2004. Reconsidering environmental policy: prescriptive consequentialism and volitional pragmatism. *Environmental and Resource Economics* 28 (1), 73–99.
- Brown, T., Jones, L., 2001. *Action Research and Postmodernism: Congruence and Critique*. Open University Press, Buckingham.
- Clark, A., 1999. Leadership and influence: the managers as coach, nanny, and artificial DNA. In: Clippinger III, J.H. (Ed.), *The Biology of Business: Decoding the Natural Laws of Enterprise*. Jossey-Bass Publisher, San Francisco.
- Clark, M., Brissette, I., 2000. Relationship beliefs and emotions: reciprocal effects. In: Fridja, N.H., Manstead, A.S.R., Sacha, B. (Eds.), *Emotions and Beliefs: How Feelings Influence Thoughts*. Cambridge University Press, Cambridge, pp. 212–240.
- Commons, J.R., 1990 (1934). *Institutional Economics*. Transaction Publishers, London.
- Connolly, W.E., 1991. *Identity/Difference: Democratic Negotiations of Political Paradox*. Cornell University Press, New York.
- Connolly, W.E., 1995. *The Ethos of Pluralization*. University of Minnesota Press, Minneapolis.
- Connolly, W.E., 1999. The critique of pure politics. In: Connolly, W.E. (Ed.), *Why I am not a Secularist*. University of Minnesota Press, Minneapolis.
- Costanza, R., Norton, B.G., Haskell, B.D. (Eds.), 1992. *Ecosystem Health: New Goals for Environmental Management*. Island Press, Washington, DC.
- Dyke, C., 1997. The heuristics of ecological interactions. *Advances in Human Ecology* 6, 49–74.
- Financing Sustainable Forestry Act (1094/1996).
- Fish, S., 1989. *Doing What Comes Naturally*. Duke University Press, Durham.
- Fish, S., 1995. *Professional Correctness*. Harvard University Press, Boston, MA.
- Forest Act (1093/1996).
- Forester, J., 1999. *The Deliberative Practitioner*. The MIT Press, Boston, MA.
- Friedmann, J., 1973. *Retracking America: The Theory of Transactive Planning*. Anchor Press, New York.
- Giddens, A., 1990. *The Consequences of Modernity*. Polity Press, Cambridge.
- Greenspan, P., 1995. *Practical Guilt: Moral Dilemmas, Emotions, and Social Norms*. Oxford University Press, Oxford.
- Gunderson, L.H., Holling, C.S. (Eds.), 2002. *Panarchy*. Island Press, London.
- Habitats Directive (92/43/EEC).
- Haila, Y., 1998. Assessing ecosystem health across spatial scales. In: Rapport, D., Costanza, R., Epstein, P.R., Gaudet, C., Levins, R. (Eds.), *Ecosystem Health*. Basil Blackwell, Malden, MA.
- Hiedanpää, J., 2002. European-wide conservation versus local well-being: the reception of the Natura 2000 reserve network in Karvia, Southwest Finland. *Landscape and Urban Planning* 61 (2–4), 113–123.
- Hiedanpää, J., 2004. An institutionalist approach to environmental valuation: the regional forest programme of SW Finland as an example. *Environmental Values* 13 (2), 143–160.
- Hiedanpää, J., Bromley, D.W., 2002. Environmental policy as a process of reasonable valuing. In: Bromley, D.W., Paavola, J. (Eds.), *Economics, Ethics, and Environmental Policy: Contested Choices*. Basil Blackwell, Oxford, pp. 69–83.
- Hodgson, G.M., 1993. *Economics and Evolution: Bringing Life Back into Economics*. Polity Press, Cambridge.
- Kauffman, S., 1995. *At Home in the Universe*. Oxford University Press, Oxford.
- Kinzig, A.P., Pacala, S.W., Tilman, D. (Eds.), 2002. *The Functional Consequences of Biodiversity: Empirical Progress and Theoretical Extensions*. Princeton University Press, Princeton.
- Levin, S., 1999. *Fragile Dominion: Complexity and the Commons*. Perseus Books, Reading, MA.
- Luhmann, N., 1995. *Social systems*. Stanford University Press, Stanford.

- Mackie, D.M., Worth, L.T., 1991. Feeling good but not thinking straight: the impact of positive mood on persuasion. In: Forgas, P.J. (Ed.), *Emotions and social judgments*. Pergamon, Oxford, pp. 201–219.
- Ministry of Agriculture and Forestry, 1999. National forest programme [Kansallinen metsäohjelma]. Ministry of Agriculture and Forestry, Helsinki (in Finnish, with English summary).
- Paavola, J., 2003. Protected areas governance: theory and the European's unions habitats directive. *Environmental Sciences* 1 (1), 59–77.
- Parkinson, B., 1996. Emotions are social. *British Journal of Psychology* 87, 663–683.
- Peirce, C., 1996. Logic, regarded as semeiotic. In: Ransdell, Joseph (Ed.), *The Carnegie Application of 1902*. Online: <http://www.members.door.net/arisbe/menu/library/bycsp/L75/L75.htm>.
- Rapport, D., Costanza, R., Epstein, P.R., Gaudet, C., Levins, R. (Eds.), 1998. *Ecosystem Health*. Basil Blackwell, Malden, MA.
- Regional Forest Centre of SW Finland, 1998. The regional goals for forestry in SW Finland 1998–2005 [Lounais-Suomen metsätalouden alueellinen tavoiteohjelma 1998–2005]. Regional Forest Centre of SW Finland, Turku (in Finnish, with English summary).
- Regional Forest Centre of SW Finland, 2001. The regional forest programme 2001–2005 [Lounais-Suomen metsäohjelma 2001–2005]. Regional Forest Centre of SW Finland, Turku (in Finnish, with English summary).
- Samuels, W., 2000. Signs, pragmatism and abduction: the tragedy, irony, and promise of Charles Sanders Peirce. *Journal of Economic Issues* 34 (1), 207–217.
- Sarbin, T.R., 1986. Emotion and act: roles and rhetoric. In: Hárre, R. (Ed.), *The Social Construction of Emotions*. Blackwell Publishers, Oxford, pp. 83–97.
- Sen, A., 2001. *Development as Freedom*. Oxford University Press, Oxford.
- The Economist, 2002. How sick is Europe? May 11th–17th.
- Vromen, J., 1995. *Economic Evolution*. Routledge, London.
- Weber, N., Christopherson, T., 2002. The Influence of non-governmental organizations on the creation of Natura 2000 during the European policy process. *Forest Policy and Economics* 4 (1), 1–12.
- Whyte, W. (Ed.), 1991. *Participatory Action Research*. Sage Publication, London.