On policy, innovations, and the case of the Local Investment Programme: How yellow and blue makes green

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In 1998 the Swedish government granted the City of Stockholm SEK 650 million in subsidy to promote and carry through measures to increase the ecological sustainability. The subsidy came by way of the new policy on Ecological Sustainability and the Local Investment Programme (LIP). One of the big posts in the Stockholm Local Investment Programme (SLIP) is the Eco-cycling Districts, with a share of SEK 400 million of the subsidy they make up the case-study in my doctoral dissertation (see Bylund 2003; 2004). This text sketches and problemize the story behind LIP at a national level.

As I am not trained in either political science or in the field of Policy Studies I might repeat the obvious and disregard important issues in this local field of research. Two reasons for doing it anyway: The local research field is not my primary audience, as I try to grasp a Human Geography theme through the case (the production of urban sustainable space). This text maps the two themes of the location of sustainable development and innovation in Swedish state environmentalism. It is also an exercise in grounded theory which has two key themes: The first one is change – what basic processes can account for change or make change, a common concern in almost all variants of the social sciences. The second is grounded theory's relation to determinism – structural conditions are acknowledged but the agent is not seen as

wholly helpless in the hands of structure, the agent is aware of choices and makes them actively (Hildebrand 2000: 32-33).

The ideal way to study policy *if* one wants to further the arguments I propose in this text is Clifford Geertz' thick description (Geertz 1993). That is, to interview the actors and documents – all of them showing up in this process – and carefully describe the how this particular policy was stitched together and let them justify their actions. Two reasons why I do not follow that path any further: I will use the opportunity given by the course to write or investigate the background of the case I really study in my PhD-thesis. This is an analysis of what started the process in Stockholm. The second reason is the time-frame for producing this text. Some of the arguments and evidence pro and contra need a lot more developing time to make sense. This is also why I mostly rely on secondary sources – except for the policy in itself – to make these arguments or to try these hypotheses. I consider this text to be a first draft, it should be rewritten a couple of times and any/every critical comments are sincerely welcome.

The following sections presents one premise, one hypothesis, and one question beside the outline of LIP: I will first set the premise that there is a great similarity between scientific theory-building and policy-making. After that I will make the hypothesis that the process ecological modernisation is in effect an extension of a government's constituency and a displacement of the laboratory. This leads to the question on the innovativeness of LIP. The answer to this question might help us grasp the kinds of policies created with ecological modernisation under the banner of ecological sustainability.

Policy is theory

An old Latin meaning of *policy* is "…the art, method or tactics of government and regulating internal order." (Shore and Wright 1997: 19) But there are no less than three definitions of policy in my computer's thesaurus: 1) a line of argument rationalising the course of action of a government; 2) a plan of action adopted by an individual or social group; 3) a written contract or certificate of insurance. In what follows I will take turns at these definitions (even the third one seems relevant in this case, I might add).

But there is a way of seeing the act of policy-making which embraces all these definitions: A policy is the political or organisational actor's hypothesis about the

world (cf. de Laat 1997).[1] Policy is the political actor's version of Society and/or Nature – the environment in this case. This world-view or 'social theory' defines the options the political actor think or deduces they have. Policy is built on experiences and evidence – on the palette of possibilities – in a similar way scientific knowledge is built around these very same actors. Put even more plainly, the actor (politician or party) build policy upon the various knowledge it has or have access to. Ideology informs this knowledge just as much professional science and research.

Further, it is possible to make a distinction using the two of the policy-definitions from the thesaurus: The statement and the programme. The statement is the hypothesis and thus to problemize, the programme is the concrete plan of action – in a way the very testing of this hypothesis. The statement is at the same time the justification and an articulation of meaning of what is inscribed in the programme. In this case the statements are found in the propositions and communications from the government to the parliament (and the public), and the programmes are the decided bills and laws.

The statement

LIP was initiated upon recommendations from the Delegation on Ecological Sustainable Development (DESD), a delegation consisting of five Social Democrat cabinet ministers. In early 1998 the Swedish parliament decided on the bill on LIP, which became effective February 3rd, and a budget of SEK 5.4 billion. The programme was intended to run between 1998 and 2000.

The bill states that municipalities could apply for a subsidy if it had measures promoting an ecologically sustainable development. The measures are eligible for the subsidy if they are aimed at reducing the environmental load; increase efficiency in energy and other natural resources use; promote the use of renewable raw materials; increase re-use and recycling; contribute to conserve and strengthen biological diversity and safeguard cultural environmental values; contribute to an enhanced eco-cycle of plant nutrients circulation; or improving the indoor environment considering allergenic substances (SFS 1998). Only municipalities or municipal associations (*kommunförbund*) were allowed to apply for the subsidy (cf. RR 1999: 22). The bill also inscribed the municipalities' gate keeping function in that the local actors has to apply to the municipal first, who makes a decision on the merits of their proposed

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[1] During the process of writing this text I have stumbled upon a reference on Majone (Majone 1981) which I have unfortunately not been able to acquire. The title is *Policies as theories*.

measure. If the measure is seen as viable, then the municipality passes the application on to the Ministry of Environment. A procedure of yearly rounds of application deadlines was set up to this end.

The government substantiated LIP along the lines that local anchoring is needed for the ecological dimension to successfully be inserted in the further structuring of society (*samhällsbyggandet*). This argument referred to Habitat II, the United Nations Conference on Human Settlements in Istanbul 1996, which laid stress on urban policies and local and regional partnerships for future sustainable development (cf. Elander and Lidskog 2000: 41-42). A second argument for seeing the success in the local governments was one of 'naturalness', since all 288 municipalities already had started work with the Local Agenda 21 (LA21). As for the municipalities' granting rights, this was considered of great importance since this framework would decide the LIP's potency in technology development and economic efficiency. Hence it is stated that the subsidy should not be tied to any specific technology, as this might subdue technology development, but rather to results. Complimentary to the ecological results in the municipalities LIP was also expected to have long term effects in national economy: economic growth and higher rates of employment would follow from technology development and 'green' markets; a stable domestic market that eases commercialisation and export of ecologically sound innovations; and set its mark upon cultural and urban landscapes (Proposition 1996/97:150). We could also add that a further reason for delegating a large part of the execution of the subsidy to the local governments is the relatively strong independence and extended powers on decision making the municipalities has been given during the 20th Century (see e.g. Alfredsson and Wiman 1997; Engström and Cars 1997).

LIP was tied to (un-)employment rates from the very beginning. The 'Budget Proposition' for the parliamentary year 1997-98 states that the design of LIP should actively help reduce the Government's objective to halve the formal unemployment until the year 2000 (Proposition 1997/98:1).[2] Hence investments that effects a reduction in unemployment are seen as an important point of departure. When it comes to the built environment and projects concerning housing the proposition states that

[2] In 1997 the open unemployment rate was 8% of the total workforce (SCB 2004).

measures in the so-called Million Programme will be prioritised.[3]   The budget proposition also expounds how LIP is supposed to work. The programme's 'division of labour' builds upon municipalities gathering local actors – private and public – who are prepared to do measures and then to compile this into an investment programme. The municipalities are held accountable to the government for the fulfilment of the objectives stated in these programmes. Instead of having the individual actors all applying directly to the government the cabinet argues that there is a need for locally grounded comprehensive views and promotes the hypothesis that such a model 'stimulates the creativity among the local actors'. Because of EC rules on states subsidising activity in competitive areas, private actors applying for LIP may only receive 30% in subsidy of the total investment (Proposition 1997/98:1).

LIP is characterised by most analysts as being a policy written within the idea(l) of ecological modernisation. According to Lidskog and Elander, the principle of ecological modernisation is dominant in Swedish policy when it comes to adapt Sweden to an ecologically sustainable nation (Lidskog and Elander 2000). So what is it?

Ecological modernisation

Ecological modernisation can be summarised as an optimistic perspective in which the guiding idea or frame is a conviction that the ecological crisis can be handled with technical and procedural innovations – without compromising the profit margins for industry or business (Hajer 1999: 366; Davoudi 2001: 87). Mol has defined the common denominators making ecological modernisation a 'school of thought' in its own right:

> (i) environmental deterioration is conceived of as a challenge requiring and 'forcing' socio-technical and economic reforms rather than as an inevitable consequence of current institutional structures, (ii) a major emphasis is placed on modern institutions for environmental reform, such as science and technology, the nation-state and global politics, and the (world) market, and (iii) a position is adopted in the academic field

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[3] The Million Programme is a public housing programme that built around one million dwellings between 1965-74 (see Hall 1998). These areas were built with industrialised prefab slabs usually as satellites around cities.]

which distinguishes it from more or less strict neo-Marxist, as well as from counter-productivity and post-modernist analyses. (Mol 2000: 46)

I propose the following hypothetical modification to these descriptions: to ecologically modernise is to extend the constituency from only citizens and economy (whose spokespersons are business, industry, and unions) to actively involve the environment as well. The question here is not whether it is right or wrong to modernise ecologically. Rather, it is about the Government's idea or theory on what action promises the most success – tangible positive results for both the 'old' constituency of Swedish citizens and the 'new' constituency of the environment (whose spokespersons are various environmental indicators monitored and evaluated).

Although the environment does not have or is not able to vote proper, it is still designated certain spokespersons – scientists and civil servants in authorities, they were always there as spokespersons, but now with more weight in their communications – and a function as judging the ecological soundness of innovations – the same innovations that promises growth and welfare to the 'old' constituency. Ecology is not given exactly the same status as citizens, but it is acknowledged as something that matters to the government – rights are in some cases extended to things or objects and an infringement against these rights might lead to law suits and legal courts judging. For the governments this is the effect of internalising the environment in policy and a state regulated economy. The 15 environmental objectives developed in Sweden is a clear instance of ecological modernisation extending the constituency (Roseveare 2001: 7). The work towards these objectives are constantly followed up and evaluated.

The need for this extension is made explicit by the UN report Our Common Future (WCED 1987), commonly referred to as the Brundtland Report, in 1987 and by the Rio Earth Summit in 1992. In this sense the Brundtland and Rio events (and their statements) can be seen as amodern (cf. Latour 1993), as they state or describe how society and nature are linked together in ecology – to the effect that there can be no such division from the point of view of sustainable development However, I think we can discuss or describe what ecological modernisation is in this case without using Modernity. (At the same time we could bracket the 'modernisation' out of ecological modernisation. Following the reasoning here it would be more accurate to call it 'ecological civilisation' – as a verb, not a noun – instead.)

There is evidence in Political Ecology and Policy Studies on sustainable development, as a concept, civilises more parts or entities than formerly acknowledged in most states' legal doctrines in the 20th century. It is extending because the difference introduced by Brundtland and Rio with sustainable development was a focus other than the merely 'end-of-pipe' solutions – the pragmatic response to the cries of 'ecological crisis' that most Western industrialised states had used from the time of awakening in the 1960-70s until the end of the 1980s and the beginning of the 1990s (Berger et al. 2001: 56). The focus now became anticipatory and precautionary for whole life-cycle processes of products and within production. With Sustainable Development ecology is now given almost the same legal status as Society (the humans-only club in Western culture). According to Elander and Lidskog, the Brundtland Report made it clear that "…the ability to anticipate and prevent environmental damage requires that the ecological dimension of policy is considered as tightly intertwined with economy, trade, energy, agriculture and other dimensions." (Elander and Lidskog 2000: 38) The Rio Earth Summit "…embraced a broader and more complex agenda [than the 1972 Stockholm Conference's focus on narrowly defined problems of air and water pollution], where the earth was viewed as one single, integrated system." (Elander and Lidskog 2000: 39) And for the 'most comprehensive strategy' so far, endorsed by 178 government delegations, the Agenda 21 which "…consists of 40 chapters that cover almost everything about the planet and how humans interact with it." (Elander and Lidskog 2000: 30) One example is the Fifth European Action Programme (for the period 1993-2000) in which:

> …environmental policy became more central to the European project, and subsequently to each individual EU member state. The rhetoric of environmentally sustainable development has as its aim the re-orientation of economic and fiscal instruments towards technologies for resource efficiency and the internalization of environmental costs and strategies towards minimizing wastes as well as longer product life-cycles. (Berger et al. 2001: 57)

Ecological modernisation is the theory on how to govern this interaction. Because sustainable development in Brundtland and Rio is concerned with identifying the problem. It does not tell politicians, planner, or economists what sustainable development might be in itself or how to recognise it (Batty 2001).

Commentators on ecological modernisation often write about it as important for understanding society-environment relations (as theory) and what to do about it keeping in mind sustainable development and/or the general well-being of the environment (as prescription) (e.g. Murphy 2000). Ecological modernisation is what the actors use to define the outside – society and nature – and to transfer the enveloping policy of Ecological Sustainability inside the cabinet to the outside. LIP is exactly that instrument, exactly that negotiation. It wont do to merely say that LIP is written in ecological modernisation language, because according to all formulaic definitions of ecological modernisation LIP is precisely that. This leads back to the question of the distinction theory and prescription, and shows us that this distinction is false or unnecessary – because every social theory is performative depending on who and how many subscribes to it (cf. Law and Urry 2004). And it will always be a prelude to what is supposed to happen outside once acted upon – that is, a hypothesis.

With the theory or hypothesis of ecological modernisation the government quite simply translates 'We, the Swedish Nation, want to be a leading country in ecological sustainability' into the interests of two actors, thereby trying to recruit them to make ecological sustainability happen: 1) the industry/business – 'we want stable markets for innovations in the field of environmental technologies'; 2) the unions (spokespersons for the worker-citizen) – 'we want full employment through a stable economy and strong export of cutting-edge products'. But using the theory also cuts the general public out of the recruitment (they were present in the enveloping policy and in LIP represented by LA21). The holistic and all-inclusive sustainability is spliced or, perhaps better, de-spliced into the interests of other actors, interests ascribed to them by the Social Democrats – in other words, they are recruited for the *Green People's Home* (I will return to this notion below).

If we say that ecological modernisation is a social theory, a translation and something to be tested against observed developments, we could also say that it is a problematisation. A problematisation is to see new associations between (new and known) actors and at the same time to define them and the barriers to goals and interests (Callon 1986, especially note 27). This is what makes the government able to set itself up as an obligatory point of passage, and by keeping the control over the LIP as process it associates itself all the stronger with the wished for outcome – that the theory makes a correct prediction on the state of things – and keeps a close grip on the experiment.

The programme in action

To separate the intentions of LIP on the one side and the *modus operandi* on the other is all the more relevant in this investigation. Because the formal distribution of powers to the municipalities was not established until the very last minute – two weeks before the municipalities' first application deadline on February 16th 1998. Still, the programme was informally launched even before the bill became effective, as the deadline for the notification of interest was October 15th 1997. Out of 286 municipalities who signalled their interest 40 were seen as promising and summoned to what the ministry called a 'dialogue' – to discuss their ideas and plans and visions with the Unit for Subsidies to Ecological Adaptation and Development (USEAD; in January 1999 renamed the Unit for Sustainable Society Building) at the Ministry, were the DESD served as a sounding board. No promises were given and 42 municipalities were granted their applications the first round of 1998 – around 35% of the municipalities partaking in the dialogue was not granted a subsidy later on (RR 1999: 19, 26-27). The 'dialogues' were later abolished by the year 2000.

The government made decisions on granting the municipalities' programmes based on each case prepared by the Ministry of Environment and the USEAD. LIP was held within the Ministry and the Cabinet, not delegated to sectoral authorities as is common in Swedish policy implementation (RR 1999: 23). (The sectoral authority responsible for the labour market was not approached for consultation at all on the coming policy.) The sectoral authorities was for their part mainly contacted during a conference in the autumn 1997 (RR 1999: 37). There was more informality surrounding this programme once launched. The bill had very loose prescriptions on how the government or the ministry should appraise measures and general criteria for what the municipalities' programmes should result in. Thus the municipalities has responded to the Parliament's own auditors that they found guidance and objectives very vague and directives sometimes contradictory (RR 1999: 55). The loose framework, although later made more stringent, in effect turned LIP into a displacer of the laboratory (cf. Bylund 2003). According to the Parliament's auditioners, the looseness gave the municipalities the possibility to 'innovate thinking' and tailoring the programme to the specific local situation. But on the other hand it also means taking greater risks and the possibility of much work done for nothing when or if rules change (RR 1999: 64).

The first two rounds of LIP in 1998 and 1999 are important. In 1998 it is a test of the new or this specific administrative administrative approach, and therefore establishing a certain praxis. But also because of the amount of money disbursed in this round – SEK 2.3 billion in 1998 (ca. 34% of the total budget for LIP) and SEK 1.4 billion (ca. 21% of the total budget) in 1999 with almost the same administrative procedure (together this makes up for about 55% of the total budget for LIP) – which means that these projects and programmes becomes bearers to a large part of LIP's success. They are path-building and there's no time to learn to be able to disburse later to more cost-efficient programmes.

In 1999 the government proposed changes in the bill. Among other things to delete the demand on profit making actors' (*vinstdrivande verksamheter*) investment in or contributing to the development of new technologies or new working methods (Proposition 1998/99:100). The change became effective in October 1999. One strong reason for this change (against one of the central tenets of ecological modernisation) was the severe critique the National Audit Bureau directed at the use of 'new technology'. In their investigation they found several different municipal interpretations of what 'new technology' could be. One municipality has, for example, chosen to interpret new technology as 'any/every technology that promotes ecological sustainability.' The Bureau concludes this is so because what counts as 'new technology' is ill-defined in the bill (RRV 1999: 92).

But why do the municipalities put up with this chaos and obscureness? They are neither forced by any law nor public opinion to do this. Simply because the Government has made them interested in taking part and offering to do programmes. Interested by the amount of money made available for environmental work and by the chance to be innovative.

LIP moves from the Ministry of Environment and the cabinet to the Swedish Environmental Protection Authority (SEPA) in 2002. This transformation in the way of handling LIP by the Government leaves room for negotiations in the municipalities' programmes. This is plausible, since around 79% of the programmes granted in 1998 are finished as of writing and the majority of them were finished in 2003. Thus I assume – based on the experience of the Stockholm case (see Bylund 2004) – that these municipalities solicited for extensions of their programmes' temporal frames (a common phenomena in research and innovation).

There is curiously enough very few sources, official as well as other academic investigations, on LIP after the year 2000 – and most of them deals with specific municipalities and not the overall perspective and processes at the government. As for the programme in action: Municipalities are still fine-tuning their closing reports (*slutrapporter*). The nation-wide results are still expectations, as all available official documents make their predictions on figures from the granted applications – that is, stated objectives and not observations on what has actually happened. There will not be any summations until the year 2005, at the earliest, when all programmes are finished. However, according to a report published in 2003, LIP is (again, based solely on the granted applications): SEK 6.2 billion in subsidies which together with the project owners' investments gives a total investment volume of SEK 27.3 billion, out of which SEK 21 billion is directly 'environmentally related.' 161 municipalities and two municipal associations received subsidies for 1.814 measures which will create 20.000 years of work (*årsarbeten*) (IEH 2003: 4). The document also states that over 'one-third of the LIP-subsidies has been allocated to projects pertaining to the shift to renewable energy, energy efficiency, and energy savings' (IEH 2003: 6).

In the case of LIP one can see the tension between sustainable development and ecological modernisation in the rhetoric on using LA21 (the broad local anchoring of environmental work) and the practice that evolved in the municipalities, that is, for the most time opting for a 'pure' ecological modernisation and measures only involving the local business. The emphasis on results, rather than techniques and methods *per se*, made it hard for the municipalities to design programmes other than those than would hypothetically most reliably (from experience) deliver results (cf. Lundqvist 2000; 2001).

LIP as an innovation in policy-making

This section is partly grounded in the process of LIP, it is also grounded in a scientific discussion on how LIP came into being in the first place. The theoretical enigma on what caused LIP to come into existence – represented here by Lundqvist who proclaimed *modus vivendi* – is an old debate in sociology and I will not be able to bring it to a full closure here.

Following Innovation Studies, there are broadly speaking two kinds of innovations: incremental and radical. Incremental innovations make up for 80-90% of major European companies and it is development of existing technologies and their

uses – that is, they are not beyond identifiable and calculable risk probability. With radical innovations, the remaining 10%, the major problem is management and evaluation since the uncertainties in the process or surrounding these innovations defy traditional methods to manage risk and probabilities of success (PROTEE 2000; see also Murphy and Gouldson 2000: 35). If we acknowledge that LIP is an innovation, then the question is whether LIP belongs to the category of radical or incremental innovations?

The argument for LIP to be an incremental innovation

It could be questioned whether LIP is a radical innovation because there is a slight resemblance to the People's Home tradition in national economics (*nationale-konomi*), in that the forces of the markets are used and that the public consumption and public procurement or, in this case, investment and change of fixed capital is supposed to not only secure employment and health issues, but also the now extended responsibility towards the environment and the ecologically sustainable society (in other words, making a detour extending the constituency to be able to cater for intra- as well as intergenerational quality of life and equity) (see e.g. Proposition 1996/97:150, Appendix 5). We could compare the statements on LIP and the theory of ecological modernisation with the People's Home-concept. For instance, Hall argues that one of the most important postulates for the People's Home in the 1930s was that there "…was no contradiction between socio-economic equality and economic efficiency; on the contrary, they could be made to reinforce each other." (Hall 1998: 847) This became a key in the construction of the post-war Swedish welfare state, as it was in consensus with the liberal opponents. Further, Gösta Rehn, economist and one of the theorists behind the model, opined that "…the goal is not to weaken market forces but to create an appropriate environment for microeconomic behaviour in competitive industries. It is no less than to induce the market to live up to the claims made for it and unleash its productive forces to maximise human welfare." (quoted in Hall 1998: 848)

This innovation in policy is also a question of the Social Democrat's identity, because ecological modernisation and LIP is how they try to re-compose not only their image but also their essence as a political entity. They reinvented themselves. Just as their social theory is tested so are their associations. The human constituency associates them with certain schemes, objectives, ideology and so on. The Social Democrats associate themselves with economics, welfare, growth, equality, and

workers. Thus two events and their consequences are dealt with by the launch of the innovation in environmental policy in 1996, *The People's Home v2.0* or the *Green People's Home*:

1) The fiscal crisis around 1992:

> There was a devastating attack on the Swedish currency in the autumn of 1992, caused by a grossly overrated value of the Swedish krona and the mistrust of international capital in Sweden's ability to handle its rampant fiscal deficit. This was followed by a very cumbersome process of repairing both the banking system and the public finances, with cuts made in welfare benefits and substantive service programs. There were some years of no – or even negative – growth in the Swedish economy, and a tendency toward chronic unemployment at unprecedented levels remains. (Lundqvist 2000: 26)

With the spark of the investment programmes Swedish industry and business, knowledge economy and a national system of innovations (cf. Lundvall 1992; Nelson 1993) were to be re-ignited.

2) The rise of Sustainable Development to a pan-environmentalist doctrine: As outlined above in the section on ecological modernisation this meant a breakthrough in many countries for a more holistic way of seeing a nation's performance. In Sweden sectoral policies was seen as working quite well until the end of the 1980s and the Brundtland Commission, when Swedish state environmentalism:

> …realized that environmental problems cut across sectoral borders in society and demanded the co-operation of state, civil society and the market for their solution. The number of actors involved in environmental problems therefore increased dramatically. 'Sustainability' became the central concept in the environmental debate. (Lidskog and Elander 2000: 200)

Hence, until 1992, long-term intersectoral planning all over the political levels from state to municipality, policies grounded in environmental research and implemented through a widening arsenal of instruments made a good job:

…to solve first-generation problems of large-scale industrial pollution, the government and responsible authorities made use of a long-standing Swedish tradition of close co-operation with well organised, responsible target group interests. Essentially the consensual and co-operative policy style developed in the late 1960s prevailed. Target groups had a well entrenched system of 'opposite numbers' working on an equal professional basis with their 'peer' environmental administrators at different levels of government in an increasingly decentralised decision-making process. (Lundqvist 2000: 22)

This was challenged by 'second-generation' environmental problems such as climate change.

Ecological modernisation is seen as a consensus scheme or strategy among the analysts of environmental policy. It is intended to avoid conflicts inherent in the 'old' environmental policies and bring the (relevant) actors together in an economic win-win situation. Thus, the Social Democrats stated in their platform proposal in 1997:

[Our party] once built the people's home in broad consensus concerning the conditions for production, increased standards of living, and security for everyone. Now, we have a similar mission. We will realise the vision of a green welfare state, and bring about a thorough ecological modernisation of Sweden. (Swedish Social-Democratic Party, translated and quoted in Lundqvist 2000: 22-23)

The argument for LIP to be a radical innovation

LIP can be described as a radical innovative from two perspectives: 1) Through the focus on the municipalities and local business learning to handle and use unconventional technological solutions, emphasised at least the first two years of the programme (still, 55% of the total budget); 2) and as a process that implies unconventional administrative ways of proceeding for the municipalities and other actors drawn into the programme to carry through projects. I am not the only one considering LIP to be an innovation leading into the unknown (see e.g. Hanberger et al. 2002) Baker comments LIP as being unusual and innovative in comparison with other EU member states. Unusual in two ways: Firstly, among the EU-member states it is an exception to promote sustainable development through large scale, state

funded investment programmes. Most member states are confined to general policy frameworks and typically the strategies rely on regulatory mechanisms backed up by market instruments. Secondly, targeting the local level – the municipalities – is 'ahead of its time', since many EU member states still tries to define and implement policies at the national level. LIP is thus a radical innovation:

> …because large state-funded investment programmes expose governments to scrutiny and to the risk of failure. LIP also places thrust in the sub-national, local level of government that has, from a comparative European perspective, an, as yet, unproven track record in the promotion of sustainable development. (Baker 2002: 109).

There is also a report written on the export potential of eco-tech developed within the LIP which states that LIP itself, as a concept, could be an interesting product for export (Andersson et al. 2004: 8).

There is yet another indicator that LIP is a radical innovation in policy-making – if we make a detour over a previous investigation into the causes of the new policy: Lundqvist (Lundqvist 2000) discusses two extreme theoretical positions on how a national environmental policy shifts from one approach to another. One position, represented by Jänicke (Jänicke 1997), is a structural and frameworks explanation where a certain set-up has potential for this change. The other position, represented by Hajer (Hajer 1995), is that of an actor striving for hegemony, in this case the government or the Social Democrats, who 'discourses' – builds discourse coalitions – her way to incorporate the new approach as it is seen as an advantage. Lundqvist's conclusion is that both positions fail to explain the shift from a traditional, sectoral environmental policy to ecological sustainability and modernisation satisfactorily, because "…we will seem as dependent on circumstantial evidence, and even speculation, concerning the strategic motives for an actor to select one story-line over others as we are when applying Jänicke's model." (Lundqvist 2000: 30)

Seeing policy as social theory and problematisation means that both structure and discourse (their possible effects on the programme) are hypothesised by the actor (see e.g. Forester 1993 for investigations in this manner on everyday practice in planning), and this approach can accommodate the process of innovation. According to findings over the last twenty years in the Sociology and History of Science and Technology there is no way a structure nor an agent can be explained with an *a priori*

theory when it comes to their innovativeness. When the actors innovate both positions crumble because they both try to explain the process from the end-product. What the case of LIP shows is the trial-and-error of testing a hypothesis, the objective is clear but the way to about it was not the usual one of delegating to the sectoral authorities. Rather, the government and the ministry of Environment held control over the process for four years, with a huge extra-workload for the Ministry (see RRV 1999). In addition to this, and even if the policy was directed at results rather than specific solutions, the Ministry had very vague ideas of what could actually be allowed and what was workable.

The backtracking or 'reverse engineering' presented in the previous sections gives a clue to what heterogeneous engineering the Social Democrats did. Heterogeneous engineering is Law's notion for what engineers must be able to handle – that is, not only the workings or ways of 'pure' technical objects or systems but also the social-political setting (Law 1987). From an analytical point of view this entails chains of translation, obligatory points of passage and the work of generating interest (see e.g. Latour 1996: 33). We could turn this around and apply to the politician building or composing policy with the socio-political setting in mind but also – in this case – nature, environment, and (innovative and ecologically sound) technology. Furthermore, as innovations are usually seen to be the product of an experiment, a test of an idea or a set of premises, the proper place for an experiment would be the laboratory. We could turn this around by making a more precise and at the same time broader definition of the laboratory. The 'laboratory' is a fuzzy notion and hard to delimit, because it is functionally a part in the reconfiguration of reality4, that is "…the production of new statements, the development of new instruments, or the elaboration of new skills and techniques…" (Callon 1994) With this definition the division of innovations becomes a division into degrees and hence of less importance. But the remaining fact is that the government located the laboratory within their own premises of governance (politics) and the experiment within the local governments.

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[4] Callon uses 'reconfiguration of networks' but I do not want to go into a lengthy discussion of his – often severely misunderstood – version of networks.

Conclusion

What can we as social scientists learn from this way of seeing policy in the making? To end this investigation into the making of LIP, and without being able to ask the Social Democrats face-to-face I relied on documents and secondary ('theorised') literature in this investigation, I would still like to make some more illicit speculations on what caused this policy.

From the discourse side we can take the building and establishing meaning – rationalising – and policy is thus, in the anthropological sense, an effort to make sense of the world and a rationale for acting in a specific way in it. Policy is path-building if meaning is 'taken in its original non-textual and non-linguistic interpretation', which is the production of a privileged trajectory 'out of an indefinite number of possibilities' (Akrich and Latour 1992: 259). What can we take from the context side? Strategy, that is what the actor expects of possible adversaries, possible counter arguments and programmes – the ones actually hitting the statement and the programme in action, this will explain how the context or the setting imposes restraints on the forming, the composition of the policy. There is also a question of what is local and what is global in the perspective from LIP, of what is inside-outside with respect to the moulding and forming of the policy. This because of all the different groups in the government where this policy had to be anchored (cf. RR 1999: 31).

The only problem with the rendering of events in this investigation is that it might give the idea that the government was all alone in this, working out their policy in a peaceful vacuum. I hope that I might give at least indications on that this is not the case in practice. Because of these reasons, the controversy that I choose to deal with here is not the formal Swedish state political and governance quarrels between left and right and party politics *per se*, but two controversies evolving from the study of these phenomena: How to describe ecological modernisation and how to describe the birth of something 'new' – in this case innovative policy making.

As a method and field of inquiry I think that Policy Studies have much to learn from anthropologists with an interest in policy-making: For them it is:

> …no longer a question of studying a local community or a 'people'; rather, the anthropologist is seeking a method for analysing connections between levels and forms of social process and action, and exploring how these processes work in different sites – local, national and global…

[not 'studying-up' only, but] 'studying through': tracing ways in which power creates webs and relations between actors, institutions and discourses across time and space. (Shore and Wright 1997: 14)

References

Akrich, M. & Latour, B. (1992), "A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies", in Bijker, W.E. & Law, J. (eds.), Shaping Technology/Building Society: Studies in Sociotechnical Change, Cambridge Mass London: The MIT Press.

Alfredsson, B. & Wiman, J. (1997), "Planning in Sweden", in Guinchard, C.G. (ed.), Swedish Planning: Towards Sustainable Development, Gävle: Swedish Society for Town and Country Planning.

Andersson, J., Brolin, L., Roth, L.C. & Andersson, U. (2004), "LIP-miljöteknik för export: En sammanställning av LIP-projekt som har potential för överföring till Östeuropa och utvecklingsländer", Rapport no. 5361, Naturvårdsverket at: <http://www.naturvardsverket.se/>.

Baker, S. (2002), "Evaluating the Swedish Local Investment Programme: A Comparative, European Perspective", in Hanberger, A., Eckerberg, K., Brännlund, R., Baker, S., Nordström, A. & Nordenstam, A. (eds.), Lokala investeringsprogram: En förstudie inför utvärderingen, UCER Evaluation Reports no. 10, Umeå: Umeå University.

Batty, S. (2001), "The Politics of Sustainable Development", in Layard, A., Davoudi, S. & Batty, S. (eds.), Planning for a Sustainable Future, London New York: Spon Press.

Berger, G., Flynn, A., Hines, F. & Johns, R. (2001), "Ecological Modernization as a Basis for Environmental Policy: Current Environmental Discourse and Policy and the Implications on Environmental Supply Chain Management", in Innovation, 14(1).

Bylund, J.R. (2003), "What's the problem with non-conventional technology? The Stockholm Local Investment Programme and the Eco-Cycling Districts", in Attali, S., Métreau, E., Mélisande, P. & Tillerson, K. (eds.), ECEEE 2003 Summer study: Time to turn down energy demand, S:t Raphael: European Council for an Energy Efficient Economy.

Bylund, J.R. (2004), "Stockholms lokala investeringsprogram och Kretsloppsstadsde-larna: En processanalys och resultatdiskussion av programmet", Report commissioned by the Stockholm Local Investment Programme Council, Urbanalys at: <http://www.urbanalys.jonas.bylund.net/text.html>.

Callon, M. (1986), "Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay", in Law, J. (ed.), Power, action and belief: a new sociology of knowledge?, London: Routledge.

Callon, M. (1994), "Is Science a Public Good? Fifth Mullins Lecture, Virginia Polytechnic Institute, 23 March 1993", in Science, Technology & Human Values, 19(4).

Davoudi, S. (2001), "Planning and the Twin Discourses of Sustainability", in Layard, A., Davoudi, S. & Batty, S. (eds.), Planning for a Sustainable Future, London New York: Spon Press.

de Laat, B. (1997), "Reversing lifestyles. Future energy technologies as a focus for analysing future energy behaviour", (ed.), ECEEE Summer Study Proceedings 1997, European Council for an Energy Efficient Economy.

Elander, I. & Lidskog, R. (2000), "The Rio Declaration and subsequent global initiatives", in Low, N., Gleeson, B., Elander, I. & Lidskog, R. (eds.), Consuming Cities: The Urban Environment in the Global Economy after the Rio Declaration, London, New York: Routledge.

Engström, C.-J. & Cars, G. (1997), "Current Trends in Swedish Planning", in Guinchard, C.G. (ed.), Swedish Planning: Towards Sustainable Development, Gävle: Swedish Society for Town and Country Planning.

Forester, J. (1993), "Learning from Practice Stories: The Priority of Practical Judgement", in Fischer, F. & Forester, J. (eds.), The Argumentative Turn in Policy Analysis and Planning, Durham N.C.: Duke University Press.

Geertz, C. (1993), The Interpretation of Cultures: Selected Essays, London: Fontana Press.

Hajer, M.A. (1995), The Politics of Environmental Discourse: Ecological Modernisation and the Policy Process, Oxford: Clarendon Press.

Hajer, M.A. (1999), "Ecological Modernisation as Cultural Politics", in Smith, M.J. (ed.), Thinking Through the Environment: A Reader, London New York: Routledge.

Hall, P. (1998), Cities in Civilization: Culture, Innovation, and Urban Order, London: Phoenix Giant.

Hanberger, A., Eckerberg, K., Brännlund, R., Baker, S., Nordström, A. & Nordenstam, A. (2002), "Lokala investeringsprogram: En förstudie inför utvärderingen", UCER Evaluation Reports no. 10, Umeå Centre for Evaluation Research, Umeå: Umeå Universitet

Hildebrand, B. (2000), "Anselm Strauss", in Flick, U., von Kardoff, E. & Steinke, I. (eds.), Qualitative Forschung. Ein Handbuch, Hamburg: Rowohlt Taschenbuch Verlag GmbH.

IEH (2003), Lokala investeringsprogram: Vägen till ett hållbart samhälle, Umeå: Institutet för ekologisk hållbarhet.

Jänicke, M. (1997), "The political system's capacity for environmental policy", in Jänicke, M. & Weidner, H. (eds.), National Environmental Policies: A Comparative Study of Capacity-Building, Berlin: Springer.

Latour, B. (1993), We Have Never Been Modern, Cambridge Mass: Harvard University Press.

Latour, B. (1996), Aramis, or the Love of Technology, Cambridge Mass, London: Harvard University Press.

Law, J. (1987), "Technology and Heterogeneous Engineering: The Case of Portuguese Expansion", in Bijker, W.E., Hughes, T.P. & Pinch, T. (eds.), The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology, Cambridge Mass: MIT Press.

Law, J. & Urry, J. (2004), "Enacting the social", in Economy and Society, 33(3).

Lidskog, R. & Elander, I. (2000), "After Rio: Environmental policies and urban planning in Sweden", in Low, N., Gleeson, B., Elander, I. & Lidskog, R. (eds.), Consuming Cities: The Urban Environment in the Global Economy after the Rio Declaration, London, New York: Routledge.

Lundqvist, L.J. (2000), "Capacity-building or social construction? Explaining Sweden's shift towards ecological modernisation", in Geoforum, 31(1).

Lundqvist, L.J. (2001), "Implementation from Above: The Ecology of Power in Sweden's Environmental Governance", in Governance: An International Journal of Policy and Administration, 14(3).

Lundvall, B.- (1992), National Systems of Innovation: Towards a Theory of Innovation and Interactive Learning, London: Pinter Publishers.

Majone, G. (1981), "Policies as Theories", in Policy Study Review Annual, 5.

Mol, A.P.J. (2000), "The environmental movement in an era of ecological modernisation", in Geoforum, 31(1).

Murphy, J. (2000), "Editorial: Ecological modernisation", in Geoforum, 31(1).

Murphy, J. & Gouldson, A. (2000), "Environmental policy and industrial innovation: integrating environment and economy through ecological modernisation", in Geoforum, 31(1).

Nelson, R.R. (1993), National Innovation Systems: A Comparative Analysis, Oxford: Oxford University Press.

Proposition 1996/97:150 Bilaga 5: Ett hållbart Sverige, 1997 års ekonomiska vårproposition, Stockholm: Sveriges Riksdag.

Proposition 1997/98:1 Utgiftsområde 18: Samhällsplanering, bostadsförsörjning och byggande, Budgetproposition för år 1998, Stockholm: Sveriges Riksdag.

Proposition 1998/99:100 1999 års ekonomiska vårproposition, Stockholm: Sveriges Riksdag.

PROTEE (2000), "Procédures dans les Transports d'Evaluation et de suivi des innovations considérées comme des Expérimentations collectives", Project Funded by the European Commission under the Transport RTD Programme of the 4th Framework Programme, Unpublished report at: <http://www.ensmp.fr/~latour/livres/rapport_2000.html>.

Roseveare, D. (2001), "Encouraging Environmentally Sustainable Growth in Sweden", Economics Department Working Papers No. 289, Organisation for Economic Co-operation and Development at: <www.oecd.org/eco/eco>.

RR (1999), Statligt stöd till lokala investeringsprogram för en ekologiskt hållbar utveckling, Riksdagens revisorer rapport 1998/99:8, Stockholm: Sveriges Riksdag.

RRV (1999), "De lokala investeringsprogrammen i praktiken: En uppföljning av kommunernas arbete", Effektivitetsrevisionen 1999:37, Stockholm: Riksrevisionsverket

SCB (2004), Sysselsättning och arbetslöshet 1975-2003, Information från Arbetskraftsundersökningarna 2004:1, Statistiska centralbyrån.

SFS (1998), Förordning 1998:23 om statliga bidrag till lokala investeringsprogram, Svensk författningssamling, Stockholm: Sveriges Riksdag.

Shore, C. & Wright, S. (1997), "Policy: A new field of anthropology", in Shore, C. & Wright, S. (eds.), Anthropology of Policy: Critical perspectives on governance and power, London, New York: Routledge.

WCED (1987), Our Common Future, World Commission on Environment and Development, Oxford: Oxford University Press.