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Jørn Holm-Hansen

The Transferability of Policy Instruments

How new environmental policy instruments
strike roots in Russia and Latvia

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How new environmental policy instruments strike roots in Russia and Latvia

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Abstract: Policies and policy instruments move between countries with variable luck. This study addresses the transfer of policy instruments based on governance and ecological modernisation to a transitional setting (Russia and Latvia). Through methodological awareness, theoretical reflection and a keen eye for the importance of institutional factors, this study seeks to identify the pre-conditions for successful policy transfer.

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Preface

This book is Jørn Holm-Hansen's thesis written for his Dr.polit dissertation at the Faculty of Social Sciences, University of Oslo. During his work with the dissertation Holm-Hansen has been a researcher at the Norwegian Institute for Urban and Regional Research (NIBR). The thesis has been written as a part of a research project funded by the Norwegian Research Council's Programme for East and Central Europe (project number 120469/730). Parts of the work with the thesis have also been supported by NIBR's funds for strategic research programmes.

NIBR thinks that the discussions and findings in this thesis are of relevance and interest for a greater audience, and we have therefore decided to publish it in our series.

Oslo, December 2005

Arne Tesli
Research Director

The thesis has also been published in the Series of dissertations by the Faculty of Social Sciences at the University of Oslo (ISSN: 1504-3991).

Foreword

While planning the research, doing field work, analysing the findings and writing up this PhD I have benefited from numerous people and institutions. Here, I can mention only a few.

I am greatly indebted to my supervisor, professor Ole Nørgaard at the University of Aarhus, for his indispensable academic support.

I would also like to express my gratitude to my colleagues in Arkhangelsk and Riga, who participated in the joint project of which this thesis forms a part. These are Feliks N. Yudakhin, Vera V. Marieva, Aleksandr N. Davydov, Galina V. Mikhailova, Galina V. Elizarova from the Institute of Northern Ecological Problems under the Russian Academy of Sciences (IEPS – RAN); Iurii F. Lukin, Sergei V. Mikhailov, and Galina Polovnikova–Feraru from the Pomor State University (PGU); and Raimonds Ernšteins, Silvija Sīle, Jurijs Benders, and Ainis Builevics from the University of Latvia (Institute for Environmental Science and Management). Terje Kleven and Birgit Jacobsen from the Norwegian Institute for Urban and Regional Research took part in the initial phase of the joint Russian-Latvian-Norwegian project, and their contributions were of use in the process of formulating the PhD thesis' basic questions.

The interviewees (see Appendix) generously shared their time and information with me, in many cases to an extent I could not have dreamt of. Thanks!

While writing this thesis I have been working at the Norwegian Institute for Urban and Regional Research. This means that I have been surrounded by more than sixty colleagues well-versed in – when taken together – every nook and corner of the social science literature and who have tried out all imaginable methods of research. This has been truly inspiring and useful. Thanks to all. NIBR librarian Inger-Helene Wang Andresen deserves a special appreciation for her fast and friendly way of helping me obtain the literature asked for. Secretary Inger Balberg has helped making the text look nice.

I also owe a debt of gratitude to Vibeke Nenseth, Pål Kolstø and Terje Kleven, who have given valuable comments to earlier drafts of parts of this thesis.

Last, but certainly not least: Thanks to my wife, Åshild Olaussen, and my children Renate, Ingrid, Lavrans and Hilde.

Oslo, December 2005

Jørn Holm-Hansen

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1 Introduction

Policies and policy instruments move between jurisdictions with variable luck. Therefore, policy transposition needs more concrete, empirical investigation based on methodological awareness and theoretical reflection. This thesis is a contribution to understanding the preconditions for successful policy transposition.

The thesis centres upon an empirical investigation of the everyday functioning of new environmental policy instruments (NEPIs) in the post-Soviet settings of one Latvian and one Russian industrial town. The thesis places NEPIs in a setting of “governance” and “ecological modernisation”, and will argue that both phenomena are quintessentially “Western”.

In other words, the thesis addresses the question of what happens when an instrument developed in one setting is transposed to another. The basic questions raised are:

- *How* do the instruments interact with the surrounding institutions and actors?
- *Why* do instruments get rejected in some cases, *why* do they get in mesh with the surroundings in other cases?

The thesis links up with the theoretical literature on policy transposition. Often, this literature has analysed the process of funnelling new ideas, instruments, and policies from one country until its adoption in another country, but not much further.¹ This thesis is about what happens next. When the “new idea” has arrived in the shape of an instrument sanctioned by legal provisions, how does it strike roots? How is it being operated in everyday life? Why does it work, alternatively why not?

¹. See e.g. Tews, Busch and Jörgens (2003) on the mechanisms by which policy transposition take place.

The users of NEPIs – the environmental actors – will be identified and studied. These are the environmental authorities (policy actor); the polluting enterprise (target group); and the local self-government, which is a policy actor since it is responsible for environmental protection locally, but also a policy actor by the fact that it runs the polluting enterprises of communal infrastructure.

Three types of NEPIs are identified, based on market-based mechanisms, on voluntary consent and on information respectively.

Contrasting lending and borrowing settings

In order to establish an analytical framework this thesis contrasts the “lending” setting in which the new instrument originally was conceived with the “borrowing” setting into which it is transposed. Since policy instruments work in interaction with their institutional surroundings an instrument that has been conceived and tried out in one country may prove to function in another way in a country where the surroundings differ. Therefore policy transposition requires insight in the institutional environment of the lending country as well as the borrowing country.

The chapter that throws theoretical light on policy transposition links this latter to institutionalist perspectives, a linkage that is followed up throughout the thesis. The thesis bases itself on the assumption that the surrounding, already existing institutionalised patterns of behaviour, organisations, ideas about right and wrong provide frameworks that have significant bearings on the prospects for new instruments to strike roots and work.

The lending setting throws light on the core features of the instruments in question, e.g. new environmental policy instruments. What were the circumstances that made NEPIs gain ground as the answer to contemporary environmental problems? What were the institutional surroundings that sustained NEPIs in everyday use?

Similarly, to what extent are the preconditions that made NEPIs emerge in the first (lender’s) place present in the new (borrower’s) setting? And what about the preconditions for making them work on an everyday basis?

Moreover, what were the circumstances that made NEPIs be invited in? What are the institutional surroundings that may sustain NEPIs in everyday use? Here, the former question points towards a study of the process of transfer between the jurisdictions (e.g. Latvia is a willing recipient of instruments of external origin whereas Russia is bringing in new instruments more reluctantly). The latter question points

towards a study of the end point of transfer, which is what this thesis mainly focuses upon. In other words, the thesis holds the differences between the lending and the borrowing setting to be more significant than the very process of transfer in explaining how instruments actually work.

Nevertheless, the process of transposition as such, of course, also plays a role. Assumedly, a transfer process that is initiated by the “borrowers” is more likely to take the differences between the settings into account and adapt the instruments to the new setting than a process of transfer that is initiated by the lenders. The question of who initiated transposition is related to the question of whether the process was voluntary or coerced, borrower-driven or lender-driven, piecemeal or wholesale.

How, then to analyse the two settings? The literature on policy transposition naturally does not help much in explaining the “core” features of the NEPI nor does it throw light on the institutional conditions under which the instruments will have to operate in the borrowing setting. In order to cope with this problem the thesis brings in two “auxiliary” bodies of literature.

Firstly, the NEPIs’ core features are sought in the origins of the instruments themselves. The contextual conditions that made NEPIs relevant in the country “of origin” will be specified by using the theoretical contributions offered by the literature on “ecological modernisation”, which sums up the recent development with environmental protection. Within ecological modernisation environmental protection is seen as a positive-sum game in which the polluters enter into co-operative and interactive schemes with the authorities. To a large extent polluters are expected to acquire and make use of environmental knowledge. It is on basis of “ecological modernisation” that the thesis develops its assumptions on what NEPIs require in order to function.

Secondly, in order to understand the setting into which the NEPIs are transposed the thesis makes use of the rich theoretical literature that addresses the polities, societies and economies of the former Soviet Union. To what extent do the transferred environmental policy instruments meet surroundings willing to and capable of adopting them?

Table 1.1 *Theoretical perspectives on the process of NEPI transposition*

<u>Lending setting</u>	<u>Transposition</u>	<u>Borrowing setting</u>
<i>Setting of the “original instrument”</i>	<i>Process</i>	<i>Setting of the “transposed instrument”</i>
→	→	→
Theoretical perspective: <i>Ecological modernisation, Governance</i>	Theoretical perspective: <i>Policy diffusion, policy transfer</i>	Theoretical perspective: <i>Soviet and post-Soviet studies, societal approaches</i>
Institutionalist approaches		

The preconditions

What are then the preconditions for NEPIs to work? This thesis operates with three main requirements. These are a “market-like” environment; actors’ ability to interact on the basis of non-hierarchical “partnership”; and the existence of an “epistemic community”.

As for the first precondition, NEPIs go along with the general trend of the latter decades of the twentieth century in making use of mechanisms that are likened to those unfolding themselves on a market place (reduce costs, maximise profits). Where traditional policy instruments within the field of environmental protection are based on command-and-control, NEPIs are meant to play with the market mechanisms in such a way that target groups (polluters) are led to behave environment-friendly. NEPIs, like charges and taxes, subsidies, tradable emission permits or deposit-refund schemes (Jordan 2001) make the polluter pay, or even more advanced, make pollution prevention pay. This is a feature of the NEPI that imply a certain degree of differentiation into a policy actor and a target group.

The second precondition is based on the ideal of NEPIs to treat target groups (potential or actual polluters) as basically responsible actors able to enter into non-hierarchical, partner-like relationships with the policy actor (environmental authorities). This is often formalised in agreements or covenants. Such arrangements are more robust if they are based on a common understanding of environmental problems.

Therefore, and this is the third NEPI requirement, much attention is paid to *knowledge*. Structured dissemination of environmental information and analytical approaches is a typical NEPI.

Environmental information campaigns, general or directed at specific actors, clearly defend their place in the new environmental toolkit. NEPIs are knowledge-intensive. The second and third feature of NEPI presuppose a certain ability of the policy actor and target group to enter into non-hierarchical co-operation and the existence of some sort of epistemic community respectively.

The assumptions

The juxtaposition of the lending and the borrowing setting are purely theoretical exercises in order to specify the contextual conditions “in both ends” of the policy transposition. This forms the basis for the development of ex ante assumptions on what the post-socialist setting offer NEPIs in terms of institutional surroundings to connect to.

The assumptions are elaborated on the background of insights in the lending setting, achieved on one hand through the analytical framework offered by “ecological modernisation”, and on the other hand insights in the transitional societies, achieved with the help of the abundant scholarly literature in the field.

The first assumption is that economic instruments will be inefficient due to weak differentiation of actors. Policy actors and target groups will be poorly differentiated, which hampers the play with taking in and giving out of resources that market-based instruments are made up of.

The second assumption is that voluntary agreements will play a negligible role because actors in formerly state socialist countries will have difficulties in establishing the non-hierarchical patterns of interaction that are required to make such agreements forceful instruments.

The third assumption is that epistemic communities, or advocacy coalitions, are feeble. Therefore, efficient use of informational instruments is hampered.

To show the “plot” of the transposition process the following “model” may be of use.

Table 1.2 *The process of transposition*

<u>Lending setting</u>	<u>Transposition</u>	<u>Borrowing setting</u>
<i>Setting of the "original instrument"</i>	<i>Process</i>	<i>Setting of the "transposed instrument"</i>
→	→	→
Market-like surroundings	Lender-driven/ coerced/ wholesale	Weak differentiation
Non-hierarchical interaction	Borrower-driven/ voluntary/piecemeal	Hierarchical interaction
Epistemic community		Weak epistemic community

The site of study – the industrial towns

In order to confront the assumptions with empirical evidence the thesis will consist of a concrete investigation of how the NEPIs fare in two single-enterprise towns in the former Soviet Union.

In order to check how NEPIs function – and why they function as they do – a close-up, in-depth study is carried out at local level. The two industrial towns chosen as sites for the study suffer from considerable pollution, but have not been defined as environmental catastrophe areas. Therefore environmental policy instruments function under normal conditions without special environmental status or international watchfulness.

Single-enterprise towns are emblematic. Features known to characterise state socialism were prevalent here, and so are the features of societies transforming themselves away from state socialism. With the dismantling of state socialism new roles emerged. What used to be a play for enterprise directors, branch ministry, party and local government was changed into one for enterprise directors, owners, central government and local self-government. This also holds true for issues pertaining to environmental protection.

Method of case studies

The concrete investigation of how NEPIs fare is an investigation of how a policy instrument interacts with its surroundings. Given the thesis' main research question it would be impossible to try and

insulate the study object from its surroundings. Therefore, case study method is applied. That method facilitates a systematic study of case–context relations.

There is no single case study method, though. Case study method is a wide approach and is being used by researchers with varying epistemological bases. In this thesis case study method is used in order to design an investigation of “how” the NEPIs are used. Asking “how” makes one look at the phenomenon at close range. This enables keeping a keen eye on the phenomenon’s complex interrelatedness with the context. The thesis looks at how the instruments enter into interaction with the actually existing surroundings to form a configuration of elements. The environs consist of among other institutions, path dependencies, social structures, and the larger context.

The case is embedded in, and interacts with its context. Understanding a case in its context, seeing the configuration of elements may be a precondition for finding general patterns and causes. Here lies the key to the answer not only to the “how” question, but to the “why” question as well. Looking at “how” makes it possible to tell “why” a new policy instrument is rejected in practice and what makes them get in mesh with the “surroundings”.

In order to grasp social phenomena empirically, their “real-life contexts” must be taken systematically into consideration. Case study method brings to the fore the actual circumstances, or conditions, under which the cause leads to the effect. This leads back to the initial question, this time asked in a somewhat more refined way: What configuration of elements is it that made the instrument work in the first place? That question is naturally followed up by: May the instruments work even if they form part of a configuration that differs from that of the original setting?

Why is this interesting?

There are several reasons for studying policy transposition. First of all, it is a phenomenon that takes place, and has taken place historically, on a large scale and in a variety of versions. Therefore, there is a need for generalised knowledge on what happens when policies and their instruments are transposed into settings that differ from those in which they were originally conceived.

Secondly, massive loans of principles, practices, policies and instruments have taken place between the “West” and the “East” after

the downfall of the Soviet Union. This thesis focuses on this variety of policy transposition which encounters a specific set of challenges.

Thirdly, the issue of policy transposition between settings that differ as to basic parameters brings some key questions of the social sciences to the fore. What is general and what is particular, and what roles do the two play?

The stages of the study

The thesis is built up of several stages. In a sequence of chapters (2 through 4) a theoretical framework is established. Theories on policy diffusion, lesson-drawing and policy transfer is taken as a point of departure. Under the collective term of “policy transposition” this literature is presented in chapter 2. The chapter discusses the institutionalist literature and links it to policy transposition.

As argued above, in order to make full use of the policy transposition approach it is necessary to know thoroughly the policy or instrument that is being transposed, among others by knowing the setting from which it emerged in the first place. This is what chapter 3 does by bringing “ecological modernisation” in as the framework within which NEPIs belong. In chapter 4 the focus is on the end point of the transposition. A rich literature on Russia and other countries with a state socialist past helps point at the points where policy instruments based on something as “Western” as ecological modernisation may be expected not to fit immediately.

The methodology of the thesis is explained in chapter 5. Several authors writing on case study method are presented, which shows that the method is used by scholars and researchers with diverging epistemological beliefs and research practices. As a conclusion of the chapter the method’s use in this thesis is outlined.

Chapter 6 provides a background to the two case studies that follow. The chapter presents the development of the environmental policy sector in Russia and Latvia since the early 1900s. Emphasis is put on the linkages between environmentalism and the general political “debates” as well as between environmental instruments and institutional and organisational surroundings. By identifying what went before, the chapter provides a background for analysing the settings in which NEPIs were operating in the period covered by the thesis.

Chapter 7 and 8 are case studies of the use of NEPIs in a Russian and a Latvian industrial town in the period 1997-2001. The chapters give an overview of the actual institutional surroundings in the two towns

with an eye on the assumed preconditions for new environmental instruments to work. The chapters proceed by showing how the new instruments interact with the surroundings. The findings are held up against the three main assumptions on the obstacles (weak differentiation; hierarchical patterns of interaction; weak basis in an epistemic community).

Chapter 9 draws the conclusions.

Table 1.3 *Outline of the text*

Theoretical foundation			Methodology	Empirical study		
Ch 2 On policy trans- position	Ch 3 On NEPI and eco- moder- nisation	Ch 4 On Russia and Latvia	Ch 5 Case study method	Ch 6 Develop- -ment of environ- mental sector in Russia and Latvia	Ch7 NEPIS in Koriagh -ma, Russia	Ch 8 NEPIS in Preiļi, Latvia

The data

Data collection was open-ended as for the type of data made use of, but strictly constrained by the research questions underlying the thesis. Official documents, interviews with key persons (see Appendix), research reports, discussions with local researchers, informal talks, and newspaper articles have been used to extract facts and ideas of relevance. Facts and ideas of relevance are those that are conducive to understanding how new environmental policy instruments are being used by environmental authorities and (potential) polluters, and why they function alternatively do not function in their actual setting.

The thesis place in a wider framework of co-operation

This thesis formed part of research co-operation financed by the Research Council of Norway's Programme for East and Central Europe (project number 120469/730). In itself the co-operation was an act of policy transposition. One of its main aims was to convey Norwegian experiences in carrying out applied environmental studies based on social sciences.

The project involved the Norwegian Institute for Urban and Regional Research and Latvian and Russian counterparts. The Latvian

participant was Institute for Environmental Science and Management – IESAM (former Cesams) at the University of Latvia. From Russia two Arkhangelsk-based institutions took part. These are the Institute for Northern Ecological Problems under the Russian Academy of Science and the Institute of Management, Law and Retraining at the Pomor State University. Published and unpublished materials written by the colleagues in Riga and Arkhangelsk are referred to in the text.

2 Theories on the transposition of policies

This chapter presents the literature on policy transposition and links it to institutionalist perspectives. The diffusion or transfer of policies from one context, country, or legislation to another is subject to attention within political science (Tews 2002; Dolowitz and Marsh 2000). The contributions to the literature differ as to what part and what aspects of the process they focus upon. As a collective term, for practical purposes, this chapter will use *policy transposition* as a collective term for policy diffusion, policy transfer and lesson-drawing.

The literature on policy transposition is mainly analysing the process of funnelling new ideas, instruments, and policies from one country until its adoption in another country. *This thesis is about what happens next*. Its main question resembles the one asked by Richard Rose, the “father of lesson-drawing” (1991): “Under what circumstances and to what extent can a programme that is effective in one place transfer to another?”

In this thesis transposition is viewed as a process that starts with the transposed policy’s genesis in its original setting and that ends with its being practised on an everyday basis in the new setting. It is precisely the contrast between the institutional pre-conditions offered in these two “extremes” that is of interest in the thesis. When the “new idea” has arrived in the shape of an instrument sanctioned by legal provisions, how does it strike roots? How is it being operated in everyday life? Why does it work, alternatively why not? Is it “fungible” or “blocked”, to use the dichotomy put forward by Rose (1993: 35). In the introductory chapter three main features of the borrowing setting were identified as potentially problematic for the reception of new environmental policy instruments. To repeat, these were: weak differentiation, difficulties in overcoming hierarchical patterns of interaction and lack of epistemic communities.

As pointed at by Dolowitz & Marsh in their much-cited article (2000) there tends to be an unjustified assumption that policy transfer leads to success. Structural differences between the “lending” and “borrowing” country may explain why transferred policies or instruments do not strike roots.

Although this thesis’ main focus is on the two “extreme” ends of policy transposition, there is reason to be aware of the process *between* them.

How the instruments were conveyed, by whom, with what knowledge-base, on what grounds and with what degree of voluntariness are likely to have an impact on the degree into which the differences between the settings are taken into consideration.

In fact, new environmental policy instruments in the two countries studied here, Russia and Latvia, differ as to how they were transposed. In the Russian case endogenous processes dominated, whereas the actual design of Latvian environmental instruments primarily is a result of exogenous factors, mainly the harmonisation to European (EU) standards. The thesis will keep an eye on the effect of this distinction on the ways differences between lending and borrowing settings have been taken into consideration while introducing new policy instruments in the two countries.

The focus on the “fungibility” of a policy or instrument across settings calls for a clear perception of the actors. They are the ones who are going to “operate” and “respond to” the new devices. Therefore, there is reason to ask whether they are doing that primarily within an institutional setting or whether, on the contrary, they proceed basically independently from institutions.

2.1 Relation between lending and borrowing setting

According to Harold Wolman (1992) policy transposition is about “borrowing from one political system for use in another”. The critical question, according to Richard Rose (1993:22) is “*whether* a program in one setting is capable of being put in effect in another”.

There is a sender and an adopter, a starting point and an end point, an originating country and a country of destination – or simply a lender and a borrower. In both ends there is a *setting* in which policies and their instruments operate.

Dolowitz and Marsh (2000) identify three main reasons why policy transfer fails. First, the “borrower” has insufficient information about policy/institutions in the “lending country”. The borrower “fails to recognise the importance of other system variables”, as the authors put it. Secondly, there is the situation where transfer actually is completed, but crucial elements of what made the policy or institutional structure a success in the original country may not be transferred. Thirdly, at times insufficient attention is paid to the differences between the economic, social, political and ideological contexts in transferring and borrowing country. In other words, success hinges on the ability to analyse contextual factors in both ends of the line of transposition.

This insight is certainly not only confined to the journals of political science, but is for instance reflected in a hand-book on economic instruments of environmental protection (Klarer & Lehoczki 1999:36):

The implementation phase of new policy instruments often brings surprises. The need for carrying out studies to understand complex economic and business linkages is sometimes recognised only after the legislation was enacted. This underlines the importance of proper preparation even if the political climate seems to offer immediate opportunities for introducing a new economic instrument.

Analysing contextual factors in both ends of the line of transposition is what Dolowitz and Marsh (2000) do when looking at Great Britain’s emulation of the Child Support Agency of Wisconsin. They were able to point at differences in the institutional structures (for instance the role of the courts) and political intentions behind using a policy instrument (which was to address the problems of sole parents in Wisconsin, but to reduce public spending in Britain).

In a similar way Martin Lodge (2003) is able to explain how EU directives on railway liberalisation fare differently in Germany and Great Britain. Lodge applies an institutional approach in which the appropriateness and legitimacy of the “templates” are considered crucial for the success of policy transposition. The appropriateness of a policy or instrument is first of all dependent upon the way the political and administrative nexus is organised in the borrowing setting. The question is to what degree this nexus offers means for “importing knowledge”. This approach may be applied for the study

of why a certain policy is chosen as well as of how it strikes root in the new setting.

Dolowitz and Marsh suggest a focus on six main questions. They ask why actors do engage in policy transfer; who the key actors involved in the process are; what is transferred; from where lessons are drawn; what the different degrees of transfer are; and what restricts or facilitates the policy transfer process. Following from the arguments above, we add a seventh question regarding what Lodge (2003) denoted the political and administrative nexus:

What processes were going on in the borrowing country/region/municipality *prior to* the initiation of policy transfer?

Were there already local responses to the challenges that the lender's instruments aimed at countering? Were new policy instruments being developed already? When policies are being transferred, an asymmetrical relationship between lenders and borrowers is established. This process has not been very much investigated. Nevertheless, it seems that the asymmetrical relationship between lenders and borrowers involves two active sides, the borrower not being less vigorous than the lender. This may for instance include the borrower presenting himself more helpless than he actually is, for instance by downplaying the fact that, in reality, he is already equipped with a set-up of functioning policy instruments. Suffice it here to mention that several former Soviet republics had developed their own, up-to-date and context-adapted environmental policy instruments in the perestroika period. The state ecological expertise (the "cousin" of EIA) is but one of them (more on this point in chapter 6).

2.2 Voluntary versus coerced transposition

The degree and kind of *dissimilarity* between lender and borrower is one major aspect that shapes the transposition. That is the main focus of this thesis. In the literature, there is also a focus on the *rationale for transposition*, which is a fundamentally political question. Why and how has it become "desirable" or "necessary" to transpose policies?

Dolowitz' and Marsh' concern in their 2000 article was to point at the importance of the distinction between voluntary (endogenously driven) and coerced (exogenously driven) transposition. Likewise Kerstin Tews (2001) addresses the problems of "policy transfer" in

cases of no local demand for it, i.e. the correlation between motives for transfer and success.

The literature on lesson-drawing (Rose 1991, 1993) had focused on voluntary, endogenously driven transposition, and had been unable to account for involuntary policy transposition, according to Dolowitz and Marsh. They found fully voluntary transfer to be theoretically possible only under conditions of perfect rationality. Fully coercive transfer would entail direct imposition. In most real-world cases, however transfer would take place on a continuum between the two extremes. Lesson-drawing then takes place under bounded rationality. New policies and instruments are introduced partly because they were found to be useful as such, but also because introducing them helps the country in question be accepted or avoid being ostracised.

Coercive versus voluntary transposition is a distinction to explain why a policy is adopted by a certain country. As noted above, this thesis asks what happens next. Nevertheless, the question of exogenous versus endogenous drives for introducing new policy instruments is important since it is an important background factor for understanding the ways new instruments were *adapted* to the surrounding environment. Per-Olof Busch's study (2003) of the diffusion of fixed feed-in tariffs and quotas in the use of renewable energy focuses on the ways policies were diffused. He distinguishes between horizontal and institutional diffusion, in which the former refers to exchange that take place directly between countries and the latter policies conveyed through international organisations. His study indicated that state-to-state diffusion might be hindered by processes of institutional diffusion.

As noted by Checkel (2001) there is a difference between policies transposed as a result of cost-benefit considerations leading to *compliance* (rationalist views) and social learning and socialisation leading to *internalisation* (constructivist views).

2.3 Types of policy transposition

The two continua (settings: similar → dissimilar/ drives for transposition: endogenous → exogenous) are helpful in establishing types of policy transposition.

Firstly, in some cases, transposition takes place between quite similar countries to adjust everyday policies without involving dramatic changes or paradigm shifts. This is the type of non-coercive,

endogenously driven policy transposition covered by Richard Rose's contributions on "lesson-drawing" which he defined as being "about the everyday activities of policy-makers working within an established paradigm" (Rose 1993:26). Within political science most of the literature on transposition is related to cases involving similar countries. This type of transfer may be termed *West-West technocratic* policy transposition (although ideological motivations may be decisive for what models to choose). West—West policy transposition is not necessarily smooth. Dolowitz and Marsh (2000) have analysed a case of policy transposition between Great Britain and Germany. Great Britain's need to improve vocational training to avoid falling further behind industrially made it borrow from Germany. Interestingly, Dolowitz and Marsh found that even here there were basic differences between the two countries. Britain lacked the institution of highly skilled workers, who in Germany carry the title of *Meister*. Differences were neglected and emulation was unsuccessful.

Secondly, large scale integration into one area of common rules leads to a particular type of policy transposition. In this case transposition is a matter of spreading common practices that have been agreed upon by the participants. Having policies transposed in one's own jurisdiction is a kind of membership fee or membership requirement. This is typically the case within the European Union and between the EU and adjacent parts of Europe (EFTA countries and applicant and accession countries). The EU exerts strong attraction on adjacent countries, and these latter adapt to common European rules. Since European integration enjoys large support in the countries in question coercive transposition is not the most apt wording. Neither is voluntary transposition fitting since it is not question of "pick-and-choose", but whole-sale packages that have to be incorporated. EU member states differ as to how much they have to change in order to reach the common standards, and with the new EU member states the difference between the lending (EU) setting and the settings of the borrowers is even greater. This may be labelled *West-West and West-East integrational* transposition. The development of environmental instruments in Latvia since the latter half of the 1990s fits into this type of transposition.

Thirdly, a somewhat different type of policy transposition is baked into developmental aid. Highly "ideological" this type of transposition aims at introducing what at a given point of time is considered the

most desirable policies in the countries able to finance aid². In this field the terms are less lender–borrower than donor–recipient, developed–developing. Interestingly, some countries, like Sweden, have chosen to merge aid to the South and project co-operation with the East in one and the same agency (SIDA). This type of policy transposition is *North-South developmental*.

Fifthly, there is the type of transposition going directly from West to East. In the early 1990s environmental policy instruments were conveyed through this line of transposition. Here, the motives behind transposition are clear – to undertake a major paradigm shift economically and politically. There has been very few objections to the need of a radical transformation although there has been disagreements over how to it. The debate between “shock therapists” and “gradualists” in the first half of the 1990s (see sub-chapter 2.5) is one of these debates that goes to the core of policy transposition. To what extent does one need to know the importing setting to make a policy tool, like privatisation or local self-government, function? Another debate (referred to in chapter 4) deals with the character of Eastern Europe (the borrower) as compared to the lender (“Western societies”). This type of policy transposition can be named *West-East transitional*. New environmental policy instruments in Russia may be expected to fall into this category.

Going back in history, it would be possible to identify even more types of policy transposition. Policy transposition is certainly not only a contemporary phenomenon. Suffice it to mention a couple of examples. Within the Roman Empire policies and policy instruments were introduced to the peripheries, the remnants of which are still living in, for instance, the Roman law. The ways Meiji Japan emulated European institutions in the latter half of the 1800s is often referred to. Here the borrower was the active part although coerced to be in the first place. In practice, Meiji Japan is a clear case of endogenously driven policy transposition.

Since 1948 Eastern and Central Europe were subject to regimentation (see chapter 4.2.2) according to a Soviet template. Interestingly, the post-War East European version of policy transposition went in the opposite direction of the versions referred to hitherto. The direction went from East to West (on these two notions, see chapter 4.2.1), from less developed to more developed countries, ironically in the name of

². See a treatise on Swedish activities in Indo-Chinese pharmaceutical policies (Jönsson 2002). Jönsson makes use of the literature on policy transposition.

otherwise Westernising and modernising Marxist political thought. The venture was a difficult one, and Stalin reportedly said that introducing Communism to Poland was like “saddling a cow” (Davies 1981b:574). Making Soviet republics on the basis of the culturally post-German mid-War states of Estonia and Latvia was a clear case of East-West transposition. The ways East Central European countries undertake contemporary transitional West-East transposition should among others be seen in the light of the fact that they have experienced Soviet-style East-West transposition. Likewise Russian attitudes to policy transfer should, among others, be seen in the light of its past as a “policy lender”.

2.4 Transposition, actors and institutional perspectives

This thesis focuses on how policy instruments developed in one institutional setting fare in another setting, which means that the thesis opens up for institutionalist perspectives. Within the neo-institutionalist perspective of March and Olsen (1989: 159)

political actors are driven by institutional duties and roles as well as, or instead of, by calculated self-interest; politics is organized around the construction and interpretation of meaning as well as, or instead of the making of choices; routines, rules and forms evolve through history-dependent processes that do not reliably and quickly reach unique equilibria; the institutions of politics are not simple echoes of social forces; and the polity is something different from, or more than an arena for competition among rival interests.

It is assumptions similar to those cited above, that make it reasonable to ask how new environmental policy instruments fare when introduced into countries with an institutional legacy of weak differentiation, difficulties in overcoming hierarchical patterns of interaction and lack of epistemic communities, which is clearly incompatible with what these instruments require. Will actors relate to the incentive structures appealed to by the new instruments? Or will they stick to what is considered appropriate within the institutions (routines, rules and forms), which have not changed in step with the declared politics of thorough transition?

These questions call for attention to institutions in the wide sense, known from the theoretical school of historical institutionalism. Within this perspective institutions are defined as “the formal or informal procedures, routines, norms and conventions embedded in the organizational structure of the polity or political economy” (Hall and Taylor 1996:6, as quoted in Schultze 1997). These institutionalised patterns of behaviour, expectations, language habits, and organisations create frameworks. Once certain institutions have been introduced in a society, a society will stick more or less to these institutions. Actors’ behaviour will take place within, and choice will be influenced by, the inherited institutions. In other words, institutions are not merely dependent factors, and they evolve, as March and Olsen (1989:159) argue, “through history-dependent processes that do not reliably and quickly reach unique equilibria”. Adaptation will always be delayed, which creates mismatch between an environment and the institutions existing in it.

Within economics Douglass C. North (1994) has pointed at the importance of institutions in the process of learning. According to North new generations acquire knowledge through “collective learning”, which is a term borrowed from Friedrich A. Hayek (“the transmission in time of our accumulated stock of knowledge”).

2.4.1 “Path dependency” and analysis in the light of the past

In a contribution to the upgrading of the studies of post-Soviet society Scott A. Bruckner argues in favour of path dependent analysis. This means looking carefully into the ways current societies, polities and economies have arrived at current structures in order to seek an understanding on what choices will be made in the future. According to Bruckner (1995:214), the institutional matrix of societies, polities, and economies is a significant factor affecting their respective growth and development patterns”.

Path dependency will be discussed here since it has had a strong influence on the scholarly work on the developments in state socialist and post-socialist countries, as chapter 4 will show.

In very general terms, path dependency claims that “events today in some sense are the product of earlier decisions and events” (Hansen 2002). In fact, path dependency sees the past capable of laying the framework for future developments, summed up by Robert Putnam (1993:179): “where you can go is dependent on where you come from,

and that somewhere you simply can't get to from here". Path dependency can manifest itself by making a certain choice impossible, as Putnam observes, but most often it just consists in "disincentive effects" (Hansen 2002).

Margaret R. Somers includes path dependency in her attempts at establishing "relational realism" as a theoretical alternative that generates causal explanations from "an ontology based on relational mechanisms". She says: "Path dependency and causal narrativity suggest that earlier institutional processes are "sedimented" into the core of some of our most modern phenomena" (Somers 1998).

Focusing on "path dependency" – the limiting effects of past choices and developments – is not uncontroversial. Anders Åslund, who soon got renowned for his scholarly arguments in favour of rapid and massive change in the aftermath of the Soviet collapse, warns against looking back and into particularities.

"Whenever countries and cultures are involved, a variety of theories inspired by the pre-war German historical school or national mysticism enter the stage. We are told that certain nations are just like that and can never change, and this idea is particularly popular about Russia. Fortunately, these factors can be studied with modern regression analysis." (Åslund 2002:75).

Åslund argues that instead of the legacies from the past – like cultural attitudes and religion – contemporary factors – like reform policies, technology, investments, and geography – play the major role. Here, Åslund advocates one of the core beliefs in what March and Olsen have termed non-institutional approaches, namely the conviction that historical processes move rapidly to "a unique solution, conditional on current environmental conditions, and is thus independent of the historical path" (1989:8). Neo-institutionalist March and Olsen hold this belief in functional imperatives to be weakly connected to empirical observations. History does not follow a deterministic course towards functional efficiency (March and Olsen 1996). Because of unstable environments and limited capacities to adapt without delays, often there will be mismatch between an environment and the institutions existing in it. Institutions "at a particular moment are a shifting residue of history, and lags in adjustment are important" March and Olsen (1989: 55). Instead of adapting rapidly to changes in the contemporary environment, "routines, rules and forms evolve through history-dependent processes" (March and Olsen 1989:159).

Elster, Offe and Preuss (1998: 293-295) suggest that contemporary developments may be explained by three types of variables that are defined according to their durability. The first group of variables are lasting long and have very little to do with intentions. These are *legacies*. Since Elster, Offe and Preuss stick to the period of state socialism and later, their legacies stem from the 20th century. This conforms to the general picture that social scientists do not look for pre-communist legacies like historians and area students often do.

The second type of variables has a medium-range durability. These are *institutions* set up on purpose to achieve a goal, and are subject to design and alteration. These institutional innovations were made in the immediate aftermath of the state socialist breakdown. The third group of variables has very much to do with intentions. These are *decisions* of recent date.

Also the historical institutionalist approach, which may be accused of focusing too much on long-term, age-old legacies, take short-term historical situations into account. Such short and significant time spans may be termed “critical junctures” or “formative moments” (Roness 2000).

In the cases of radical shocks the effectiveness is dependent upon the *inefficiency* of history, and the ability of new institutions to establish themselves as sources of new path dependency (March and Olsen 1989: 64).

Unlike most scholars of the social science mainstreams, area students tend to play down the importance of “proximate factors”, both institutional innovations *and* decisions, in explaining contemporary developments, although they may be useful for understanding events. Bunce (1999) exemplify such proximate factors by referring to bargaining between elites and opposition, or establishing a particular agency. This chapter, however, argues that proximate factors, like the introduction of new environmental policy instruments (NEPIs), may be significant. The effect is then dependent on a well thought-out strategy to cope with legacies.

At this stage it is once more necessary to call attention to the distinction between choosing a policy and making it work. At the moment of selection under conditions of critical juncture, choosing a new policy may be relatively easy since path dependency is invalidated for a time. Later on, in the field – where policies are to be implemented – path dependency may linger on. The question is whether new decisions have altered the structures in a sustainable way

to annul path dependency. Juliet Johnson (2001) addresses these questions.

Juliet Johnson (2001) criticises the path dependency concept for being too lost in structural explanations to be able to explain why changes actually occur. For pedagogical purposes, she makes a point of the fact that there was nothing in the structural set-up around Mikhail Gorbachëv that pointed towards perestroika. The concept's strength lies in its ability to explain why change does *not* happen. She launches a revised version termed "path contingency" that explicitly treats choice (for instance state-led institutional design) as an independent variable. What are then the factors that enable or disrupt state-led institutional design in post-communist countries? The assumption is that institutional legacies will matter, but to a different extent under different circumstances. What matters is to find out under what conditions policies of institutional design fail or succeed.

Johnson holds the importance of institutional legacies to be contingent upon the type of policy choices made by state actors. She distinguishes between *passive* and *active* design. Passive design does not directly create new institutions in the narrow, organisational, sense of the word, but aims at fostering new patterns of behaviour. The macro-economic stabilisation of the immediate post-1989 period of East and Central Europe is an ultimate example of passive design, including price liberalisation, privatisation, currency convertibility, hard budget constraints. Passive design, although radical in its objective, is indirect in method. The state is an indirect agent that takes on the task of preparing the ground for actors to behave in a desirable way by opening up for incentive structures that lead to desirable behaviour. The aggregate decisions of actors that led to market-oriented frameworks are what passive design aimed at in former state socialist countries.

Active design, on the other hand, entails creating new organisations and bodies, as it was done in the aftermath of the first wave of passive design in East and Central Europe. Setting up new state banks and tax authorities was part of an active design strategy, and these institutions proved to be indispensable for the new system to work.

Institutional legacies, or as Johnson puts it, the "initial institutional context", play a more important role for the success of passive design than for active design. For active design state capacity is what matters most. Johnson's argument is that passive design is vulnerable to already existing power structures and institutional set-ups. As it will

be argued below, NEPIs primarily base themselves upon passive design.

2.5 The role of institutions in the debate on economic transition

How to transform the former state socialist countries after the collapse of state socialism? In the first half of the 1990s a debate raged between adherents of rapid and massive borrowing of policies and instruments (“shock therapy”) on one side, and on the other, the supporters of a careful and gradual change based on some respect for home-grown institutions. They formed the two most distinct “camps” in the debate on East-West policy transposition. Most of the debaters came from the economic science, and little explicit reference was made to the literature on lesson-drawing, policy diffusion or policy transfer. Nevertheless, the whole debate centred on the pivotal question referred to above, on whether what functions one place will function another place. Moreover, the two sides differed in the ways they conceived the settings (lending and borrowing).

As for the borrowing setting, adherents of shock therapy would like to see all remnants of the past discarded, and they believed that was possible to achieve. These radical reformers tended to see the inherited institutions from state socialism as wholly subversive to the transition process. Correspondingly they easily trusted new institutions inspired by, or even copied from, advanced countries in the West.

Gradualists, on their side, argued that the remnants of the old political and administrative nexus might be of use, and exactly what could make new instruments and practices work. According to the cautious reformers, one reason for economic problems in the region was the importation of non-compatible institutions from abroad: «As post-communist countries have been borrowing, as one might like to call them, core institutions on a large scale, the possibilities for misspecification can not be ruled out» (Poznański, 1995:22).

Clearly, the gradualist awareness of differences in political, social, economic and mental structures of lender and borrower is similar to that of the scholars within “policy transfer”. They both open up for the possibility that a given moment transposing a certain policy or instrument may be premature. This may happen if the process is too much driven by factors exogenous to the context into which instruments are to be introduced.

The main question posed by most observers of Central and Eastern Europe since 1989-91 is: What makes capitalism work? The answer given by Amsden, Kochanowicz and Taylor (1994) was “institutions”. Poznański (1995) answered “information through institutions”. Whereas scholars assuming generality tend to base this assumption on a pre-supposed rational, fully informed agent, others (within evolutionary and neo-institutionalist theory) focus on the behaviour of the (economic) agent and his ability to adapt to changed institutional settings.

If the agent is not fully informed and rational, he will have to rely on the “tacit knowledge of organisations”. Accumulated knowledge and information through experience enables him to screen and handle available information. Rapid and massive change might lead to unintended consequences, like economic actors losing channels through which to handle information. This might in turn lead to a retreat into old patterns of behaviour, according to evolutionary theory and neo-institutionalist theory, exemplified by the economists Olga Kuznetsova and Andrey Kuznetsov (1996). They argue that the volatility, insecurity and instability caused by the rapidity of reform encourage «short term adjustments, allowing prompt corrections and revisions», rather than «profound changes». This has made it rational for enterprises to (a) seek to avoid rapid dismantling of the «old» structure; (b) try to conserve habitual methods of administration. Their call is for attention to detail in the transition process.

Late-comer countries must adopt foreign concepts - be they political arrangements, administrative structures, technological solutions. Their workings have to be explained within the local context of language, traditions, myths and metaphors. «Interpreters» are needed, but in East Central Europe and the former Soviet Union they have been few in number. Foreigners and locals accustomed to foreign ways are often received with great mistrust. According to Amsden, Kochanowicz and Taylor (1994:182):

“Analyses of the local political tradition are therefore as important as insight into social structures and political coalitions. All innovations must be filtered and mediated through these traditions”.

The institutional approach by Amsden et al. (1994) was a harbinger of the turn in mainstream thinking on transition that was to come (a certain shift was observable in 1993 according to the authors). The World Development Report 1997 of the World Bank reflected this

shift from neo-classical hegemony to a situation in which also institutional analyses were given the floor (World Bank, 1997).

2.6 Conclusion and relevance for the further study

This thesis is about transferability. Theories on lesson-drawing, policy diffusion and policy transfer suggest certain relationships between the ways policies and instruments are being transferred and their fate in the new setting. Likewise these theories put forward hypotheses on the effects of differences between the lending and the borrowing settings.

Policy transposition is a process consisting of several sequences.

1: *Genesis of the policy*. It begins with the coming into existence of a policy or instrument in the first place. The circumstances around the “genesis” of the new policy must be analysed. What made the policy desirable (what problem was it a response to)? What actors supported it and were ready to underpin it as soon as it was introduced? What already existing institutional arrangements did the new policy lean against/ what institutional arrangements did it link up to? These questions are important because they should be asked for the borrowing setting as well. Contrasting the two *settings* is the main tool in the procedure of a) identifying the preconditions for a new policy or instrument to work and b) identifying what preconditions for an instrument to function that do not exist in the borrowing setting, or alternatively what circumstances (actors, institutional arrangements, organisations) that could make up for the lack of surroundings identical to those found the lending setting.

2: *Policy getting ready for transfer*. What makes the policy cross the borders? It is not necessarily the same reasons that made the policy appear that makes it “move”. As seen in a sub-chapter above, reasons vary from transition, developmental aid to political changes (both peace and war). There is a varying combination of push and pull factors and varying relative importance of policy exporters and importers (transfer by invitation or by self-invitation, piecemeal or wholesale). All this have a bearing on the fate of the new policy.

3: *Policy moving*. Channels through which new policies are conveyed vary. There may be bi-lateral types of transfer or international agreements or regimes through which policies are transposed.

4: *Policies being adopted*. At this stage the borrowing setting is decisive. The setting is made up of the borrowing state's political and administrative nexus, and not least its less tangible institutional features like habits, knowledge, expectations, routines and procedures. Relevant questions are: Has there been a process of adaptation prior to the adoption of the new policy or instrument? To what extent has there been a process of adaptation to the borrowing setting's institutional arrangements? Has the new policy been subject to political debates and conflict, hearings and public participation? Has possibly unintended consequences and impacts of introducing the new policy been assessed?

5: *Policies being carried out and instruments used on an everyday basis*. This is the final stage of a process of policy transposition. The way implanted policies and instruments function depends to a large degree on how they were filtered through the four preceding stages of transposition.

The thesis concentrates on the relationship between stage 1 (policy's origin), 4 (adaptation) and 5 (the actual working, functioning, everyday practices, mode of operation). This entails contrasting the lending and the borrowing setting.

The birth of the new policy forms part of a shift in the lending country just like the borrower's wish to transpose the policy into his own setting forms part of a shift. These shifts, however, are not necessarily the same. In the case of new environmental policy instruments the lender's shift was from traditional environmental protection to ecological modernisation, the latter linked to the turn to governance. The borrowers (Russia, Latvia), however, introduced NEPI and similar instruments first as a part of perestroika and then later as part of the transition from state socialism. In other words, the borrowers' introduction of NEPIs was part of a much larger and more fundamental shift than the one that took place in the lending setting and that gave rise to the new instruments.

The borrower's shift to NEPIs has another and a different starting point than that of the lender. So, when bringing in concepts like ecological modernisation and governance as the framework within which NEPIs operate, the question soon arises whether the borrower's starting point allows him to enter into the era of ecological modernisation and governance. If not, NEPIs will end up in a setting that may force them *not to be NEPIs*. In other words, the question is whether the Russian and Latvian political and administrative nexuses are ready to receive and incorporate new policy instruments born out

of the shift to governance and ecological modernisation. This is a question of institutions in a broad sense.

Merely referring to the institutions (or to the past) is, of course, not very convincing although the reference may appeal to an intuitive feeling of continuity. However, the potential fruitfulness of the assumption hinges on its ability to identify what specific features of the institutional past which contribute to what decisions, and what mechanisms that create the link.

3 Theories on new environmental policy instruments

This chapter provides an understanding of the policy instruments that are being in focus throughout this thesis. It is argued that NEPIs are linked to the shift to “governance” and more specifically to “ecological modernisation”. The chapter explains where the thesis’ basic assumptions come from.

What is it that makes New Environmental Policy Instruments – in short NEPIs – “new” as distinct from traditional instruments for environmental protection? This chapter argues that “old” and “new” instruments base themselves on two diverging sets of theoretical assumptions on what makes target groups behave as desired by policy actors. Traditional instruments enable *direct* control, whereas NEPIs facilitate *indirect*, “*soft*” influence on behaviour.

As pointed out by Raumo Sairinen (2000:20), NEPIs are based on the idea that environmental management is a continuous interaction between groups and forces in society, public and semi-public organisations, institutions and authorities, private actors and interest groups. NEPIs open up for interaction, rather than direct control. The latter is to be used as a last resort. This way NEPIs fits the deregulatory trend that characterised the last decades of the 20th century.

However, NEPIs are not only a defensive adaptation to the deregulatory trend, but also a dynamic attempt to make use of opportunities offered by the new, more market-based surroundings. These attempts are clearly linked to the policy-style summed up as “governance” as contrasted to the traditional “government”. Governance consists in “governing mechanisms which do not rest on recourse to the authority and sanctions of government” (Stoker 1998).

This fits very well with the paradigm of “*ecological modernisation*”. Ecological modernisation is a wide concept that sums up developments since the late 1970s and early 1980s. Whereas much of the environmental debate until then had a distinctively system-critical approach, ecological modernisation is optimistic on behalf of the existing system, although in some of its versions demands are pitched high on “the system” to institutionalise self-critical reflection. Ecological modernisation consists in a programmatic compromise between “ecology” and “economy”.

The current division of NEPIs into three groups – market-based economic instruments; voluntary agreements; and informational devices – points at three essential features, all of which are also core features of ecological modernisation. As noted earlier, these are: sufficiently differentiated actors operating in market-like surroundings; actors (policy actors and target groups) able to enter into partner-like relations; and a knowledge-base concentrated in an epistemic community.

The three groups of environmental instruments find themselves spread all over the continuum ranging from “cost-benefit assessments” to “internalisation of values”, where the economic instruments appeal to the former, and informational instruments to the latter. The use of agreements as an environmental instrument base itself upon both self-interest and values.

3.1 How NEPIs work – a simple model

In this sub-chapter, the NEPIs will be “dissected” in order to analyse the basic logic they base themselves upon. Leaving contextual factors aside for a while, the main “logic” behind the new policy instruments will be presented. The point of departure is a simple model presented by Peter Jan Klok (1995). The model, which is inspired by economy in its focus on quantities, foresees two main groups of actors – *policy actors* and *target groups*. In its simplest form the model envisages policy actors changing the activities – behaviour – of the target group by changing the available *resources* and/or *motivation* (Klok 1995:26). As we will see later, the model also envisages target groups themselves changing available resources and motivation (in fact, this constitutes a central element of the NEPI way of thinking). Resources are of many kinds, not only money, but also skilled people, physical goods (ranging from buildings to energy and clean air), information, legal rights, time, and trust. Resources may be in *stock* (at the actor’s

disposal) or alternatively, in *flow* (in changing amount). The core of environmental instruments consists in their capacity to enable *depriving* and *providing* resources directly or conditionally.

It is worth noting that Klok himself terminologically prefers “instrumental tactics” to “policy instruments” because most real-life instruments consist of several elements, being partly of regulative, a financial and an economic character.

Resources are not the only important factor. *So is motivation*. In its most clear-cut version the model depicts polluters’ behaviour as dependent upon the policy actor’s changing the available resources and/or motivation. This is illustrated in the table below.

	Motivation	
Resources	Present	Absent
Present	A	C
Absent	B	D

(Klok, 1995:26)

As mentioned, the policy actor may make use of provision and deprivation of resources or motivation, and he might do that either to make the polluter carry out an activity, or to make him refrain from it. In the first case, situation A would be very promising. The representative of the target group (for clarity we call him the polluter) both has the resources and a motivation to behave in environmental-friendly ways, which he is most likely to do. Therefore, when the policy actor wants to manipulate polluters into *performing an activity*, it is a matter of making them “move into situation A”.

In situation B, the polluter has the motivation, but lacks means to behave eco-friendly. Then the policy actor may provide the resources, i.e. make the stock flow positive as seen from the point of view of the polluter. In Latvia and Russia ecological funds and subsidies are instruments for such cases. A far softer measure would consist in providing a non-monetary resource like information or knowledge in order to stimulate environmental convictions. Situation C leaves the policy actor with the use of less popular instruments since here the polluter has got resources, but lacks the motivation. The policy actor then must generate a negative flow of stock, or deprive the target group of resources, thereby creating motivation. This is conditional deprivation of resources. Among the environmental policy instruments analysed later in this study, fees and fines are typical examples of

instruments for this use. In situation D there are neither resources nor motivation on the part of the polluter. This is the situation most likely to be found in former Soviet states, at least according to mass media coverage. Here, conditional provision of resources would be appropriate.

Hitherto the scheme above has referred to a situation in which the policy-actor wants the target group to carry out an activity. In the opposite situation – if the policy actor wants to make the polluter refrain from an activity – situation A represents the case when the polluter both is motivated and equipped with the resources for doing the thing that the policy actor does not approve of. Therefore, when the policy actor wants to manipulate polluters into *refraining from an activity*, it is a matter of making them “move out of situation A”. The policy actor may use simple deprivation of resources to bring the actor into situation C. Here, the polluter maintains his motivation, but is simply made incapable of affording to make it come true. Conditional deprivation or provision, on the other hand, would lead the polluter into situation B or D. In these cases the polluter’s (harmful) motivation is removed.

Hitherto the model has been described as if instrument use is going on between policy actors and target groups only, and most often this is the case. However, Klok’s model includes mechanisms that are pivotal for the NEPI way of thinking. These mechanisms consist in *self-provision* and *self-deprivation* of resources, stimulating target groups’ activities. This leads to “a change of resources and/or motivation that should result in a change of environmentally relevant activities by the actor”, as Klok puts it (1995: 31). A NEPI makes use of resources like information, legal rights and time. The same holds true for policies that stimulate the employment of environmental officers in industrial enterprises, using skilled people as a resource. Both examples show the use of resources to boost motivation, and noticeably not just through economic pressure, but by internalising environmental concern. This is a main feature of new environmental policy instruments.

The four basic, or plain, “instrumental tactics” are useful when activities directly related to the environment are to be altered. However, the exchange of resources with the environmental policy actor usually accounts for a minor part of the total flow of resources to and from an actor. Therefore Klok emphasises the importance of what he terms “*multi-layer instrumental tactics*”. These tactics seek to influence activities of the actors that indirectly influence on the environment by affecting the resources and motivation that are related

to activities relevant for the environment. So, in addition to the four basic tactics mentioned above, there are two multi-layer tactics:

Provision/deprivation of resources by the target group itself (EIA; environmental managers in the organisation)

Provision/deprivation of resources to/from target group by others (e.g. covenant between the policy actor and the target group, like a branch agreement; deposit refund system; stimulation of an interest organisation)

The four basic tactics and the two multi-layer tactics all presuppose already existing actors. However, playing with provision and deprivation of resources the policy actor may create new actors, either from scratch or by reorganisation. In fact, this constitutes a major instrumental tactic.

This sub-chapter presented the building blocks of environmental instruments as decomposed by Klok in order to provide a rough framework for the study of real-life environmental instruments.

3.2 Theoretical framework: Ecological modernisation

In this study NEPIs are treated as true children of ecological modernisation. Maarten A. Hajer's book *The Politics of Environmental Discourse – Ecological Modernization and the Policy Process* is considered to be a standard work on the issue. Using discourse analysis, not forgetting about its institutional dimension, Hajer (1995) is able to trace the emergence of a new way of relating to environmental policy both among environmentalists and policy-makers. Whereas the former group used to be fundamentally opposed to what they found to be the inner logic of the existing economic and social system (usually referred to as "capitalist"), the latter tended to deny the existence of deep-seated dilemmas under the prevailing conditions. In Hajer's language they made use of two diametrically opposed *story-lines*, or "narratives on social reality through which elements from many different domains are combined and that provide actors with a set of symbolic references that suggest a common understanding (Hajer 1995:62).

In sum, ecological modernisation bases itself on the following statements, or story-lines, that gained what Hajer terms "discursive hegemony" (1995:65):

- Regulation of the environmental problem appears as a positive-sum game
- Pollution is a matter of inefficiency
- Nature's balance should be respected
- Anticipation is better than cure
- Sustainable development is the alternative to defiling growth

The cleavage between the traditional approach to environmental protection on the one hand, and ecological modernisation on the other, developed gradually, but fast since 1972, according to Hajer. Finally the mainstreams both of environmental groups and policy actors used the same story-line, that of eco-modernism. "In the most general terms", Hajer says, "ecological modernisation can be defined as the discourse that recognises the structural character of the environment problematique but none the less assumes that existing political, economic and social institutions can internalise the care for the environment" (Hajer 1995:25). In the words of Martin Jänicke, who first coined the concept, its formula is to make use of "the inherent logic of the economic system as their driving force" (Jänicke 2000).

The story-line of ecological modernisation was fully in step with parallel and dominant story-lines throughout the 1980s and 1990s, most notably in the field of economics. As Hajer (1995:26) puts it, "ecological modernisation frames environmental problems combining monetary units with discursive elements derived from the natural sciences". Furthermore, it portrays environmental protection as a "positive-sum game" – environment-friendly management pays off.

The eco-modernist story-line downplays conflicts and contradiction in its presentation of economic growth. Where the first environmentalists insisted that economic growth is intrinsically harmful, eco-modernists believe that growth and environmental protection may be combined if clever arrangements are chosen. This view was most efficiently broadcast through the Brundtland Report. Its catchword – "Sustainable Growth" – was later to be concretised, and spurred on several practicable solutions.

However, an introduction to ecological modernisation only focusing on its compliance with, and optimistic belief in, "the system" would not be adequate. Ecological modernisation also aims at pressing the same "system" into incorporating environmental concern in its every-day running. Ecological modernisation means that environmental policies base themselves on anticipate-and-prevent instead of react-

and-cure. To what extent ecological modernisation opens up for a substantial shift in the “system’s” way of functioning, is subject of discussion between scholars. Maarten Hajer seems to see a radical potential in ecological modernisation.

On the other hand, Martin Jänicke (2000) argues in favour of a narrow, technical-economic definition of ecological modernisation to mean the sum of governmental actions to stimulate environmental innovations and their diffusion. Its objective is to make clean technology replace end-of-pipe solutions. Jänicke coined the concept of ecological modernisation when he was a local politician in Berlin, trying to find practicable environmental solutions satisfying both the need for efficient urban management and the wishes of Berlin’s environment-friendly voters.

Under any circumstance, ecological modernisation implies that authorities acknowledge the structural character of environmental problems and that, at the same time, the environmental movements resort to a pragmatic attitude instead of fundamental criticism of the political and economic systems as such. Both sides have been shaken to the depths of their previous convictions.

If there is a positive-sum game going on, it is only natural that target groups are entrusted with tasks within environmental protection without being directly controlled by state authorities. As a consequence all actors are expected to take part in the solving of environmental problems. The top-down approach is replaced by the co-operative scheme of the NEPIs. This means that ecological modernisation sees the state as being capable of taking new roles. For instance, in working with target groups (polluters) the state is capable of arranging agreements that are accepted as voluntary by the polluters. It is able to make the polluter take some responsibility for polluting less – on the polluter’s own initiative. The authorities aim at educating not only the major environmental polluters, but the whole population into environmental actors.

This does not seem very stunning at first sight, but it nevertheless may be seen as an element of a paradigmatic shift. Ecological modernisation, and NEPIs, take into account the shift away from a top-down system of governing with clear delimitation between state and non-state actors. This shift has been analysed from various angles in the social science literature. One of the contributions is concentrated in the literature on the relationship between the state and the civil society, which will be returned to in chapter 4. Here, it is worth emphasising another input to this debate – Ulrich Beck’s

concept of “*sub-politics*”, which is drawn on his own analysis of on environmental politics. Politics develop more and more outside the field of traditional state control. In Beck’s words the “centering of hierarchical decision-making power at the top of the political system is becoming a memory of the pre-, semi-, or formal-democratic past”, according to Beck (1992: 193). Today this state of affairs is supplemented by “sub-politics”. Policy development and agenda-setting is no longer solely the responsibility of the democratically elected state authorities. Business, science and technology set the agenda through “sub-political innovation” (Beck 1992:14).

When analysing the functioning of NEPIs the concept of sub-politics may be useful for the understanding of target groups, since the concept envisages spheres of society previously defined as being outside the political sphere (like the family, business etc) taking political roles. Ecological modernisation envisages broad participation from a wide range of actors, and self-regulation, which both are preconditions for a system of NEPIs to function. All this requires a certain level of common “knowledge” shared by actors not least since NEPIs are characterised by being knowledge-intensive. That is why this thesis brings in the concept of “epistemic community”, defined as “a network of professionals with recognised policy-relevant knowledge within that domain or issue-area” (Haas 1992).

The epistemic community is one among several knowledge-based groups (disciplines, professions) that centre on shared criteria of validity and a policy enterprise, to use Haas’ words. The epistemic community, however, is a somewhat tighter group since it also shares normative and causal beliefs. This it has in common with Paul A. Sabatier’s (1988) “advocacy coalition”, defined as “...people from a variety of positions (elected and agency officials, interest groups leaders, researchers) who share a particular belief system – i.e. a set of basic values, causal assumptions, and problem perceptions – and who show a non-trivial degree of coordinated activity over time”. Sabatier’s article is based on a study of changes within the policy field of US air pollution control. He spotted two advocacy coalitions, the Clean Air Coalition and Economic Efficiency Coalition.

According to Sabatier advocacy coalitions share:

- a deep core of fundamental normative and ontological axioms
- a policy core of basic policy choices and causal assumptions (basic strategies for achieving normative axioms of deep core beliefs)

- secondary aspects of their belief systems (instrumental decisions to implement policy core).

3.3 NEPIs and their preconditions

NEPIs are based on a set of presuppositions and preconditions on the settings in which they are introduced. The societal, economic and political surroundings of the new instruments must contain a minimum of characteristics that make sense of the ideas behind ecological modernisation, and that make the NEPIs work. From what has been said above, it is possible to identify a set of core preconditions for NEPIs to function.

Governance

The “idea” behind NEPIs may be summed up in indirect methods and horizontal, partner-like relations between the authorities (the policy actor) and societal actors (the target groups). The latter are entrusted with a large degree of self-initiative and self-regulation. These essential characteristics of the NEPIs may be linked to the new roles of the state following from the economic liberalisation, but also to a more general shift in the ways the state apparatus is imagined towards subsidiarity and decentralisation. As mentioned above this tendency may be summed up as “governance”. The governance perspective is neither a normative or causal theory, but rather a theoretical framework emphasising the interactive character of new public policy. It is a perspective where the number and types of actors, interests and concerns that are involved is significantly increased at the same time as central authorities’ steering ambitions and belief in direct public regulation is reduced.

Jordan, Wurzel and Zito (2003) hold the governance turn in academia and policy-making circles to one reason why NEPIs gained ground in the first place. “NEPIs are clearly a symptom of governance”, as the authors express themselves.

Autonomous actors

What then are the necessary preconditions for NEPIs to work? Most fundamentally, NEPIs presuppose that there are autonomous actors, i.e. that a certain process of demarcation between actors has taken place. This is illustrated by “the simple model of NEPIs” presented in the sub-chapter above. This is not to say that there ought to be “Chinese walls” between the actors, but rather to say that actors should have a distinct identity from where to enter into possibly new

constellations. In fact, Jon Elster, Claus Offe and Ulrich Preuss (1998: 31) sum up the basic contents of transition by saying that "Much of the ongoing process can actually be conceptualised in terms of the splitting up of encompassing and multi-functional institutional compounds into smaller and more specific units".

Market-like surroundings

Furthermore, NEPIs presuppose that the relevant actors operate in surroundings of the kind that is metaphorically likened to a market. Economic NEPIs "manipulate market incentives", in the words of Jordan, Wurzel, Zito and Bruckner (2003). Here, actors' main concern is to try to minimise costs and maximise profits. The economic instruments, which prevail among the NEPIs, value use of natural resources as well as emissions, thus forcing industry to take environment into consideration. This way, NEPIs are designed to make use of the dynamics inherent in the economic market by playing with the market mechanisms in such a way that target groups (polluters) are led to behave environment-friendly. This is the case for instruments like charges and taxes, subsidies, tradable emission permits or deposit-refund schemes (Jordan 2001).

The steady increase in the use of new environmental policy instruments in most countries of the industrialised world since the late 1980s is usually explained by these instruments' compatibility with the deregulatory trend that has dominated in the same period. This is particularly the case for the sub-group of NEPIs labelled economic instruments. These instruments are friendly to the market mechanisms (in the sense that they do not directly infringe upon them) and they are dependent upon them to function.

Direct regulation is supplemented by indirect regulation. As pointed out by François Lévêque (1996: 17) indirect regulation most often consists in market-based incentives to channel economic activity into environmentally desirable directions. Economic instruments have been defined as instruments which "affect estimates of costs and benefits of alternative action open to economic agents" (OPEC 1997:15).

The incentives are provided by economic instruments like fees, taxes, loans, tradable permits, tax relieves, subsidies, sale of permits and quotas and deposit-refund systems. These instruments force polluters to think over costs and benefits of alternative action, but polluters are not forced to choose one specific response to the stimuli. They are supposed to make economic calculations in order to find the most beneficial solution. This is held to be conducive to efficiency,

efficiency being defined as a policy where costs are justified in terms of their effects, a policy that maximises the effect net of the costs (Semeniene & Żylicz 1997: 37).

Traditional regulation (command-and-control) does not necessarily lead to cost-efficient solutions. Market-based instruments, on the contrary, lead to efficiency because it is left to the discretion of each polluter to decide how to behave in order to reach the goals. Polluters with high abatement costs would be allowed not to clean whereas polluters with low abatement cost would earn from cleaning much, and therefore they would be likely to do that (OECD 1997:27). Command-and-control would force the polluter with high abatement costs to clean as much as the polluter with low abatements cost.

Of course it is not always possible to draw a sharp line between indirect, economic and direct, political-legal (regulative) instruments. J-P Klok (1995:34) argues that almost all regulative instruments foresee economic sanctions, and almost all economic instruments are formulated in terms of legal rules. Furthermore, as pointed out by Erik Schmidt (1995:130) economic mechanisms are not much worth if they are not combined with, or protected by, a state apparatus able to carry out its decisions. However, the main point is that the economic instruments are based on manipulation of resources in a market-like environment.

Voluntary agreements

Thirdly, the new instruments presuppose that actors are able and willing to interact on a voluntary basis. In fact, they expect that industry/polluters are enlightened to the extent of being able to act far-sightedly – without being forced – in cases where short-term non-environmental behaviour pay. Otherwise information and voluntary agreements would be very weak instruments, indeed. Voluntary agreements are typical for the new, “soft” generation of environmental policy tools. Such agreements may be unilateral or negotiated with the authorities.

In short, NEPIs presuppose demarcation between actors; market-like organisation of the economy; actors willing to take part. In this study all these three conditions are held to be met in broad terms in both countries of investigation. In other words, the *settings* provide a framework into which instruments can be introduced. What is of interest is then *in what ways* actors are autonomous, surroundings are market-like and agreements are feasible. The answer to that question forms the basis for analysing how NEPIs function, and what it takes to adapt them sufficiently to the context to make them work.

3.4 Conclusion on NEPIs in a theoretical perspective

By way of introduction this chapter promised to extract the main characteristics of NEPIs through a perusal of the theoretical contributions on the subject. What was found? The use of NEPIs is based theoretically on a hypothesis suggesting that the most efficient way of influencing target groups' behaviour is *indirect* (as opposed to pure command-and-control). The theoretical suggestion is substantiated by the fact that NEPIs (indirect instruments) are based on a wide range of measures. Not only money and legal rights are seen as resources that can be offered to or removed from the target group. Moreover, NEPIs leave more to the target group itself in terms of finding ways out. For instance they may choose to cut production, improve technologies, or pay for pollution.

The combination of the policy actor using several types of resources, for instance information, and the target group being invited to take part, among others in finding his own solutions, makes for a *cognitive* change on the part of the target group. NEPIs invite the polluter to behave rationally in an economic sense. Additionally, he is urged to behave rationally in a wider, environmental, sense.

In short, we have to do with ecological modernisation. Ecological modernisation, however, has its roots in the specific social, political, economic and mental "climate" of the highly developed capitalist world of the late 20th century.

Then, returning to the overall scheme of policy diffusion, one major question arises: How do policy instruments that are based on ecological modernisation fit into a context of former state socialism? To answer that question, it is necessary to have a theoretically clear grasp of "transition", which is what the next chapter contributes to.

4 Theoretical perspectives on Russia and Latvia

Above, it has been argued that the introduction of a policy instrument may fail if the specificities of the *setting* into which it is grafted are disregarded. The present chapter will give a theoretical framework for understanding the contemporary Russian and Latvian settings where NEPIs have been introduced.

Approaches like the one chosen for this thesis are applicable for the study of the introduction of policies and policy instruments not only into post-socialist countries, but generally when ideas from one setting is set into practices in another. However, students in need of insight into post-socialist settings, especially Russia, have at their disposal a particularly rich and varied literature to draw. Much of this is thanks to the fact that the Soviet Union and its allies were subject to in-depth studies as a result of Cold War needs to know the potential enemy.³

This chapter presents and discusses a broad choice of literature with a focus on the countries that underwent a period of state socialism. Contributions come from the fields of history, ethnography, sociology, East European area studies and political science. The chapter will address those issues discussed by students of Soviet and post-Soviet societies that have a special relevance for issues pertaining to policy transposition.

³ This fact, of course, could also give rise to certain distortions. This is what Michael Burawoy (1995: 78) argues: “Sovietology was born and grew in an ideological bubble. It lagged behind theoretical developments in social sciences and received them only in a heavily mediated fashion. It was unable to encounter the societies it studied except through specially chosen academics, censored media, or bitter dissidents.”

First, there has been a debate between particularistic and generalising approaches. Scholars emphasising the particular tend to be less optimistic on behalf of transposed policies than those emphasising general mechanisms, likely to unfold irrespective of institutional idiosyncrasies. Secondly, and related to the first debate, was the disagreement over the importance of distant as opposed to recent factors. Veterans in area studies tended to be particularistic, a position they based on reference to factors distant in time.

Thirdly, there was a discussion in between area students. Although they believed that legacies played a role, they did not agree on what these legacies actually are. Some treated the Soviet system as being inherently totalitarian, and they usually claim that legacies consist in after-effects of an almighty state. Others viewed the system in a societal perspective and were ready to take into account possible responses from the society to the Soviet system. This chapter follows up the societal position. A separate sub-chapter deals with the role of a possible civil society, or lack of it, as a factor in fostering trust between state and society. Likewise a sub-chapter will address the issue of knowledge under state socialism. Both issues are held to be of importance for underpinning NEPIs.

Drawing on authors who attach significance to Russian and Latvian history a moderate version of the path dependency perspective is applied below. It is believed that developments taking place and choices made in the past may have bearings on contemporary institutional frameworks. The possible legacies of the Soviet as well as the period prior to it are presented. This underpins the three main assumptions on the setting, the weak differentiation, the difficulties in overcoming hierarchical patterns of interaction and the lack of epistemic communities. As it will appear later in the thesis, the insight in the past also helps analyse some unexpected findings.

4.1 The particular and the general

Until the late 1980s most of what was written about Russia or the Soviet Union belonged to the cross-disciplinary field of “area studies”, a field that almost by definition treats states and societies as “unique”. Many studies concentrated on the particularities of Soviet/Russian habits, convictions and behaviour. Not much was written about the developments in Soviet Latvia.

With 1989-91 came the easier access to Central Europe and the Soviet Union. Researchers flew in from abroad, and mainstream – non-

idiographic – social science entered the field, mainly attracted by the richness of empirical material to be picked up in the former state socialist countries. The newcomers to the field knew the theories of issues like democratisation, institutional choice, and parliamentarism, and wanted to apply and refine them on the newly “opened” region. This practice has been termed “interloping” (Burawoy 1995) or “trespassing” (Bernhard 2000).

Authors within area studies focused on distant factors whereas newcomers attached more significance to proximate factors to explain today’s developments. Area students often knew about and made use of the long perspectives (*la longue durée*) whereas the social scientists were more likely to believe in the effects of recent developments and arrangements to which they had good access

The newcomers were bringing in a wider, less culturally particularistic approach. They brought with them social science techniques earlier inapplicable in these countries. Area students and newcomers differed in their emphasis on the particular versus the general, a distinction with direct relevance to the transferability of policy instruments from one context to another.

The tensions between approaches aiming at generalisation and those tending towards explaining the particular were marked in Western studies of the Soviet Union in the aftermath of the Soviet collapse. The studies of the former Soviet Union is in itself subject to path dependency. The legacies of the past structure the study field. Prior to the dissolution of the Warsaw Pact the need to “know one’s enemy” and the active use of insights from émigré scholars from the humanities produced a strong tradition of idiographic area studies. This stood in stark contrast to the situation in the studies of Western societies themselves, where the generalising approaches prevailed.

Depending on whether a research project is based on ideographical or homothetic ambitions the outcome has different implications for the ongoing reform process. Karl and Schmitter formulate it like this (1995):

“Which is the better strategy: Should the scholars of post-communist transition rely primarily on the unique cultural, structural or behavioural features inherited from the ‘marxist-leninist-stalinist’ past in their efforts to understand what the outcomes of these momentous transformations will be? Or, should they focus on a more generic set of issues and utilise primarily non-area-specific concepts that presume a less historically

constrained range of choices and hence a greater autonomy for actors?”

Here, Karl and Schmitter point not only at the differences in regard to preferences as to particular versus general approaches but also at the implications of choosing either the first or the second. The second opens up for “a greater autonomy for actors”, more emphasis on opportunities than obstacles, in short an optimistic view on the potential effects of designing a new type of society.

In 1994 and 1995 debate in *Slavic Review* brought the conflict between area specialists and generalists to the fore (Schmitter & Karl 1994; Bunce 1995; Karl and Schmitter 1995). Schmitter and Karl (1994) boldly argued in favour of transitology – studying Eastern Europe on the backdrop of other recent transitions. Transitology emerged as an embryonic sub-discipline of comparative politics, according to Karl and Schmitter. Unlike area students, transitologists willingly developed and tested their hypotheses across cultural and historical settings. Without being painstakingly accurate about all details they compared and drew parallels between countries and regions that had undergone a shift from autarky to a democratic project. This, of course, was tantamount to sticking one's neck out to criticism from area specialists arguing that the assumed detail was no detail when considered in its context (see e.g. Bernhard 2000).

On their hand, Schmitter and Karl maintained that there is nothing wrong in testing tentative conclusions in cultural and historical contexts different from those which generated them in the first place. This is not necessarily “acultural extrapolation”. After all, turning to explanations like “political culture”, “historical legacy”, or “national character” without operationalising soberly does not meet the demand of being “empirically falsifiable and conceptually explicit”.

Karl and Schmitter were countered by Valerie Bunce, a senior scholar within Soviet studies. She refutes the assumption of Schmitter and Karl that East European transition simply offers new cases to be added to the cases of South American and South European transitions. East European transition is not a variation over a known theme. State socialism, according to Bunce, was different from Latin authoritarianism along almost all relevant dimensions: social structure, ideology and ideological spectrum, political economy, the configuration of political and economic elites, relations between civilian and military groups, international position.

Equally, Michael Burawoy (1995) found comparisons with South America not very promising since that would entail de-emphasising

the core trait of state socialism, its administered economy. In a similar vein, Philip G. Roeder (1999) says that transitologists did a mistake in descending on post-communist countries “without knowing what had gone before”. This flaw made them draw wrong parallels to the countries they actually knew. They treated Russian transition as a replica of South American re-democratisation. Instead of comparing post-communist transition with Latin America in the 1980s, Roeder claims, transitologists should have drawn parallels to the period in which Latin America developed democracy in the first place, i.e. the 1830’s.

Interestingly, and seemingly paradoxically, both Bunce and Roeder engage in comparative analysis to arrive at their conclusions. Roeder argues that it is not the differences between countries that should discourage researchers from comparison because it is exactly the dissimilarities – and anomalies – that may help develop theory. Instead of dismissing comparative political analysis and transitology, their contributions could be read as an invitation to co-operate. The study of the particular could do well with theoretical suggestions drawn from elsewhere as well as from pure theoretical considerations. Likewise, the more parsimonious studies driven by theory would be refined by inputs from area studies.

Going back to Bunce’s reply, it is worth noting that she avoided vague references to political culture and the like. Instead she specified the independent variables that made it untenable for her to draw direct parallels between South and East. Her reply demonstrated the fruitfulness of knowing a region at close range, but she also showed that the comparison called for by her adversaries, and by and large carried out by Bunce in the very reply, brought to the fore new insights. She did not show that comparison is futile, but that it has been knowledge-scarce and marked by vague ideas about the actual independent variables. What Bunce did, is to continue comparison, but with considerably more precision. The precision is enabled by knowledge gained from area studies.

As the methodological chapter will show (see chapter 5), paying careful attention to context does not have to be combined with particularism. A close look at context may generate insight in general patterns that would not be discernible at a distance. Therefore, there is no need to choose either area studies or general social science.

Works in the tradition of area studies have engendered some of the most influential theories within the social sciences (examples are offered in Johnson 1997). Several works can be mentioned to

underpin this point, among them Barrington Moore's "Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World" (1966). Benedict Anderson's "Imagined Communities" (1983) was based on in-depth knowledge on Southeast Asian societies. Robert Putnam's book (with Robert Leonardi and Raffaella Y. Nanetti) on civic traditions in Italy could not have been written without in-depth insight of the kind offered through area studies.

In the scholarly debate between area students and "trespassers" both sides seem to have stopped caricaturing themselves and each other. Area students now actively relate to theory development, and trespassers display deference for empirical data accessible only by in-depth studies. In a much referred-to debate in the American journal *PS Political Science and Politics*, area studies get rough treatment by Robert H. Bates (1997), who nevertheless recommends a combination of local knowledge and general modes of reasoning, area studies and formal theory.

4.2 Developmental paths of Russia and Latvia

In this sub-chapter some of the authors who have made in-depth, country-specific and context-sensitive studies of the Russian Empire and the Soviet Union will be reviewed with the aim of specifying what exactly from the past (distant as well as close) that creates "dependency" by establishing "institutions".

In order to structure the presentation, the chapter groups past developments in three: the period prior to state socialism; the transitional period to state socialism; and state socialism. According to path dependency all three periods may have a bearing on the contemporary period, which is one of transition from state socialism. The idea may be illustrated in a table:

Table 4.1 *Developmental paths of former state socialist countries*

Country	Prior to state socialism	Transition to state socialism	State socialism	Transition from state socialism	After state socialism
1	A	b →	C	d →	E
2	P	q →	R	s →	T
3	K	l →	M	n →	O
4	F	g →	H	i →	J

Events, choices and developments in each of the periods create frameworks within which events take place and choices are made in the next period. The frameworks consist of institutions in the wide sense (institutionalised patterns of behaviour, expectations, language habits, organisations). It is here that the origins of cultural differences, as expressed in differences in attitudes to e.g. authoritarian decision-making, pluralism of opinions, participation, or wage inequalities must be sought. At this stage it is worth repeating that the frameworks must be understood as frameworks of incentives and disincentives, not as straitjackets. In the table below the framework is specified with reference to Russia and Latvia.

Table 4.2 *Developmental paths of Russia and Latvia*

	Prior to state socialism	Transition to state socialism →	State socialism	Transition from state socialism →	After state socialism
Latvia	Autocracy with limits	Exogenous	Soviet type	Institutional discontinuity	?
Russia	Autocracy	Endogenous	Soviet type	Institutional continuity	?

4.2.1 The period prior to state socialism

Can contemporary reform failure or success in a given country be explained in part by referring to events prior to the advent of state socialism, as path dependency postulates? Outstanding scholars in the field of Russian studies would answer in the affirmative, but they would not necessarily agree on the actual effects of the past. For instance, Stefan Hedlund (2001), Richard Pipes (1999) and Kristian Gerner (1995, 1997) would hold not only the Soviet epoch, but also the pre-socialist past to create obstacles for reform whereas Martin

Malia (1999) sees pre-Soviet Russia as basically reforming and westernising itself only interrupted by totalitarian Communism. For Malia, then, the pre-Soviet past is an asset to draw on in the period of transition.

Pipes (1999b) looks upon Russia as a basically “Asian” country. Historically Russia has never had feudalism (mutual obligations between lords and vassals), private ownership, or self-governed cities/towns. These three institutions, in Pipes’s view, enabled the specific level and kind of freedom that has marked Western Europe. The lack of all the institutions is what made Russia a “patrimonial society” (“Russia under the Old Regime”, 1974). In his book – Property and Freedom (1999) – Pipes makes a case for property rights as the single most important factor to generate democracy and human right protection. He holds property rights to be *the* missing institution throughout Russian history. Russia has never espoused the distinction made in Roman law between “*imperium*” (political power) and “*dominium*” (the right to use and consume one’s thing as allowed by law), which is a fundament of Western democracy according to Pipes (1999:11).

In Western Europe the landed aristocracy and the burghers acquired property rights in the late Middle Ages, their “homologues” in Russia were totally dependent upon the “crown’s favour” that determined their fortunes and social status (Pipes 1999:184). The same applied for the serfs. Whereas in the West serfs became freemen during the late Middle Ages, in Russia freemen became serfs.

Therefore, according to Pipes, Russia differed fundamentally from Western Europe in the late Middle Ages and early Modernity even under Peter I, whose modernising strategy was based upon mercantilism, which strengthened the power of the crown, and made it only more arbitrary than before. Catherine the Great was inspired by the Physiocratic belief in property rights to land. She let the concept of property (*sobstvennost’*, a calque of *Eigentum*) be introduced in legal text for the first time in Russia. The 1785 Charter on Rights, Freedoms and Prerogatives of the Russian nobles stated that these latter owned their lands and were guaranteed civil rights. For the first time a class of persons in Russia were guaranteed life, personal freedom and property (Pipes 1999:194). This is in sharp contrast to the Central European powers of Hungary and Poland, where nobles constituted

the nation and controlled the crown⁴. Pipes (1999:194) sums this up by saying that “with property rights came personal rights”, but fails to lay out the mechanisms that lead from personal rights *based on property* to democratic, stable and efficient societies, polities, and economies.

What is the relation between imperium and dominium and weak state versus strong state after the actual processes of privatisation that have been carried out in former state socialist countries?

This is what Stefan Hedlund (2001) sets out to analyse. He, like Pipes, makes a case for the Russian differentness through the concepts of “state” and “property” and he perceives property rights to be the key to development in Russia. Nevertheless, Hedlund disagrees fundamentally with Pipes on the lessons to be learnt from the pre-Soviet period. Pipes calls for property and a weak state. Hedlund argues in favour of a strong state to uphold property rights. Combining economic transition with the idea that the state should withdraw could only lead to the opposite of the stated goals. As Hedlund puts it: “Perhaps the most important complication of all was that success in this endeavour would have required successful introduction of a system of secure property rights, into a social system where the very notion of ‘rights’ as such was seriously underdeveloped” (Hedlund 2001).

Hedlund questions the universal validity of Adam Smith’s dictum that “it is not from the benevolence of the butcher and the baker that we expect our dinner, but from their regard of their own interest” (The Wealth of Nations, 1776). What is it that separates Smith from Thomas Hobbes’ who 130 years earlier claimed that property was the creation of a state that protects the owners from the state of *homo homini lupus*? According to Hedlund, the pervasive systems of norms that had developed range from basic business ethics to trust in the role of the state. Adam Smith’s metaphor of an invisible hand was applicable because “the majority of all economic actors realised that abiding by the rules really was a common interest” (Hedlund 2001).

Hedlund’s main point is that as long as institutions are weak, the state must be there, and in Russia institutions are weak:

“One of the most important keys to understanding the failure of building a rules-based system of market

⁴ On the role of the Polish nobility in Davies 1981a:201-255), the effects of which should be noted, but not exaggerated, according to one student of liberal thought in Poland, Jerzy Szacki (1994: 56-62).

economy lies in a deeply rooted Russian pattern of rule aversion, which over time acquired a strongly path dependent nature. Over the centuries, economic actors viewed tsarist legislation as weapons pointed at them, and consequently sought ways of evasion. In that endeavour they built networks and human capital that was marked by increasing returns, and they evolved mental models rationalising such behaviour” (Hedlund 2001).

Kristian Gerner (1997), on his hand, is less focused on economy and property. Without explicitly referring to Putnam, Gerner makes use of concepts like “social capital” and “civic culture”. “Social capital”, according to Putnam (1993:167), refers to social organisation, such as «trust, norms, and networks» that can improve the efficiency of society by facilitating co-ordinated actions». He holds social capital to facilitate spontaneous co-operation because it increases the feeling of predictability. The opposite of this situation is “amoral familism”, in which a political system is viewed only as a means to pursue personal interest. Trust does not develop and is replaced by violence, threats and bribes (Gerner, 1997: 26-27).

Gerner draws parallels to the literature on Italy, where the northern regions and the southern Mezzogiorno reportedly, by Robert Putnam (1993), have varied in their ability to make use of modern, capitalist institutions. The same holds true for the differences between Russian and Central European attempts at incorporating this type of institutions, Gerner claims. Palermo and Naples are to Milan and Genoa what Novgorod and Moscow is for Kraków, Gdańsk and Prague. Referring to Thomas S. Noonan’s (1975) study of Novgorod, Gerner shows how even those Russian towns that used to be in contact with the West in medieval times, «chose» to reject the Western institutions. Novgorod did not adopt the Western historical developmental model nor take part in the transition that characterised the foreign, non-Orthodox society in Western and Central Europe (Gerner, 1997:23). In towns and cities of Central Europe, where Western institutions and concepts once had been introduced, they went on living even in periods of decay and isolation, as was the case of Central Europe of the 1600s and 1700s.

In other words, according to Gerner, differences between Russia and the rest of Europe are deep-seated and essential, having their roots long before the advent of state socialism. In this respect, Latvia clearly belongs to the Central European sphere. Throughout the almost 200 years of Tsarist rule, the Baltic provinces retained a special status, and internal affairs were organised according to German standards.

Protestantism was adopted not only by the Germans, but also by the local peasants. And when first established, Protestantism was not done away with by Counter Reformation as it was elsewhere in East and Central Europe. In the parts of present-day Latvia that used to belong to the Polish sphere of culture, Baltic peasants were Roman Catholics like their lords, and following Gerner, not Eastern.

A more optimistic view is represented by Martin Malia (1999), who perceives Russia not as being “Asian”, but on the contrary forming part of a European whole. Europe is not divided in East and West, but is a *spectrum of zones graded in level of development from the former to the latter* (Malia, 1999: 12-13). Malia’s pre-Soviet Russia is not essentially reactionary. In fact, under Peter the Great and after Russia saw a longer uninterrupted period of Enlightenment than any other European state. Malia views Russian history since the early 18th century as a process of getting closer to Western Europe, a process that was halted by the Bolshevik/Communist regime. According to Malia Russia is not generically different from Western European countries, cultures, societies, or civilisation, but he certainly holds the Soviet Union to have been. In Russia, Marxism was not a Westernising force, Malia argues.

Summing up on the legacies from before state socialism

Is Russia basically European, having taken part in European processes of modernisation throughout the centuries, although from the periphery? Alternatively, is Russia an “Asian” country defined by what “European” features it never got, like mutual obligations between lords and vassals, private property and self-governed towns and cities?

The chapter has presented some of the core scholarly contributions to this debate. For the purpose of the thesis the debate is of great importance. If Russia is perceived as being closer to the European than the Asian ideal type NEPIs would more easily fit in than if Russia is seen as lacking any reference in the past to “power-sharing”, mutual obligations, or independent institutions. As the chapter has shown, scholars also disagree as to the effects of historical Russia’s lacking distinction between imperium and dominium, between political power and the right to use and consume one’s objects as allowed by law. At this point, some would argue that the state should be discrete in order to let the desirable institutions emerge and strengthen themselves.

Others would, on the contrary, see a visible and strong state as the precondition for institutions to develop. This discussion is of

relevance to NEPIs that in their original form base themselves on a state apparatus that is present, but discrete. Interestingly, Latvia does not share Russia's past, not even from the period when the regions today constituting the bulk of Latvia were part of tsarist Russia. The Latvian areas were marked by the German, Protestant culture of the overlords.

4.2.2 The period of state socialism

There is a large literature on the preconditions for socialist revolutions to become a success according to their own criteria, but it will not be dealt with here. Suffice it to mention the Menshevik argument on maturity. Russia had to become mature, i.e. bourgeois, in order to take one step further, which was to be socialism. Another Marxist theoretician, Antonio Gramsci, noted that there was a big difference between Russia and Western Europe:

“In Russia the state was everything, civil society was primordial and gelatinous; in the West, there was proper relation between state and civil society, and when the state trembled, a sturdy structure of civil society as at once revealed.” (From the Prison Notebooks, as quoted in Simon 1982:28)

For tracing the historical roots of today's institutions the period of transition to state socialism plays a role mainly for two reasons. First, because it laid the foundations for the longer period of state socialism. Secondly, because the fervour with which institutions have been replaced after state socialism seems to be dependent upon the way they were introduced.

The way state socialism was introduced in a country may have influenced on the way state socialism developed. In cases where the introduction was made mainly by endogenous forces, like in Russia, state socialism may be believed to strike deeper roots than in cases of exogenous transposition. Latvia got state socialism as a result of the country's forced incorporation into the Soviet Union, which made nominal dissolution of everything that smacked of state socialism a legally justifiable thing to do in the early 1990's.

State socialism consisted of different periods, from extremely authoritarian, to relatively liberal. And, as noted above, there were national varieties. Therefore it is possible to talk of periods, and even state socialisms in plural. State socialism was marked by the tension between the general principles of state socialism and the local

contexts. From a theoretical point of view this tension has traits in common with this thesis' question on transferability. Some of the policy innovations introduced as a part of the regimentation in Latvia and the rest of East Central Europe after the Second World War may at a theoretical level be compared to new policy instruments introduced in the 1990's. For instance, collective farms or one-man rule in the enterprises (*edinonachalie*), were held to be applicable in all countries. In practice, the actual ways these institutions functioned in each country varied. Factors to explain the differences may be found in the agricultural property structure prior to state socialism, or in the degree of a unionised workforce. In other words, path dependency was discernible.

Saying that the actual design of state socialism was contingent upon traits inherited from the past, does not exclude the observer from acknowledging that state socialism's general principles permeated the polities, societies and economies of East and Central Europe. The first of these principles was centralised economic planning and management, which was believed to enable the most efficient mobilisation of resources. The quasi-dogma of "democratic centralism" was a core element of this principle. The second principle consisted in strict standardisation of opinions. As a rule only one policy line was legitimate at the time. Also this principle was underpinned by a quasi-dogma, that of "the leading role of the Communist Party".

According to scholars who saw the Soviet Union as a totalitarian state, like Martin Malia did, state socialism was so wrong that it could not leave any heritage that would survive under conditions of democracy and market economy. Others, like Stark and Bruszt (1998), argue on the contrary that the un-feasibility of pure state socialism triggered off a set of survival strategies. These strategies consisted in several institutions that may prove to be robust enough to survive under new conditions.

There is reason to ask whether state socialism in Soviet Russia, analysed by Malia, and in East Central Europe, analysed by Stark and Bruszt, may be taken as parallel phenomena. As shown above, several authors hold the historical backgrounds to be intrinsically different, in particular regarding the prospects of societal response. For instance, Richard Rose (1998) shows that Russians adopt "antimodern tactics", like offering a bribe, use connections or make up a story to get a child into university, get a flat, to jump the hospital queue much more often than do Czechs. However, the analytical points put forward by Stark and Bruszt have relevance for state socialism in general.

Their argument is that since state socialism was not very practicable in an economic sense, except perhaps for periods of war, a lot of counter-strategies and mechanisms – in fact, “extensive networks of economic co-ordination” – were invented. After all, the state socialist countries were equipped with industrial enterprises. These enterprises were dependent upon networks based on reciprocity and associative ties. Such networks certainly were not endorsed by the official ideological dogma, but were unintended consequences of attempts at “scientific management” of the national economy.

In order to cope with shortages and bottlenecks at enterprise level, Stark and Bruszt argue, there were negotiations between supervisors and informal groups of workers. As a consequence of allocative distortions a second – black, but strong – economy developed. In order to fulfil the plan, informal ties between enterprises and local organisations developed. All this amounts to “routines and practices, organizational forms and social ties”, and certainly no vacuum (Stark and Bruszt, 1998:128). These institutions play an important role in the period of transition, the authors claim, since they can be the basis for credible commitments and co-ordinated actions in the transition period.

4.2.3 Societal approaches in the study of state socialism

Views like those of Stark and Bruszt are inconceivable without a willingness to see a *society* in addition to the prevailing *state* under state socialism. In very broad terms it is possible to talk about a “societal” perspective in the studies of state socialism. What they have in common is a theoretical readiness to see a living society during state socialism where scholars in the totalitarian tradition would see a strongly inhibited society. Scholars in the societal tradition include Richard Sakwa, Moshe Lewin, Stephen Cohen, László Bruszt, David Stark, Katherine Verdery and Michael Burawoy. Among these authors, only Bruszt and Stark focus on the Central European variety of state socialism.

Moshe Lewin (1995: 60) sees society as “the whole human aggregate, and its interrelations”, which are patterned in different ways, but indispensable. That was also the case during the different periods of state socialism. As Lewin (1995: 64) puts it, “not everything was pure policy, design, or plan”. He makes use of the “bedrock” metaphor to describe the societal configuration in a certain period.

The Stalinist period, which was “an accelerated effort to take the eighteenth century into the twentieth” created a three-layered bedrock consisting of peasants (poorly collectivised or newly urbanised and industrialised); a working-class without machines; and managers and apparatchiki without formal training (Lewin 1995:64). Although Stalinism was a project of modernisation, it could not be explained without references to what went before, according to Lewin. Stalinism was a confluence of three features, all of them rooted in pre-revolutionary Russia. Authoritarian patriarchy (rural mentality); the autocratic political tradition (tsarism); and workplace despotism (smokestack industry).

Despite its illiberal nature, but thanks to its insistence on what Lewin terms “hectic industrialisation”, the Stalinist system brought about development. Social mobility, education, professionalisation and urbanisation resulted in a new social complexity. Demands were made for more autonomy in various parts of the system, but that was precisely what the Stalinist system could not incorporate. Later, de-Stalinised state socialism in some countries played with the idea of introducing limited autonomy in the economic sphere, by letting state enterprises operate as semi-independent units and even allowing some kind of independent formation of opinions. Nevertheless, Lewin (1995:63) sums it all up like this:

“It all began with the bulk of society being composed of a rather primitive, not very dynamic peasantry, facing an action-oriented bureaucratic state, and ended with a complex urban society pushing for change, facing a stagnating bureaucratic state – quite a turnover!”

To sum up, Lewin witnesses a transformatory state that is stagnating due to its inability to cut loose from pre-revolutionary Russia, and passed over by forces created by the development after all triggered off by the same state.

Richard Sakwa (1998), on his hand, sees a transformatory state that had to *adapt* to – make peace with – the social surroundings. Transformation and adaptation are key concepts in Sakwa’s analysis both of state socialism and of the period of transition. The transformatory project is ideologised, whilst the adaptive processes are de-ideologised (Sakwa 1998: 185). Josef Stalin’s cultural conservatism (“concession to middle class values”) and Leonid Brezhnev’s variety of a social contract are among Sakwa’s examples of adaptation.

In the late 1980's in the Soviet Union and some Central European countries, the issue of adaptation was taken some steps further. From merely making concessions to society, the authorities gained the understanding that society had to be brought in as a partner. László Bruszt and David Stark noted that there were not strong states that met a weak society in East and Central Europe, but that both sides were weak. Bureaucracies were weak – “ineffective for achieving the goals of economic growth and social integration” (Bruszt and Stark, 1992:14). This insight was obtained not only in the ruling circles of Poland and Hungary, but in the Soviet Union as well, which resulted in perestroika.

Similarly, Michael Burawoy (1995) challenges the predominant view that Russia inherited a strong state and a weak economy. Rather the Soviet state had a bargaining relationship with the enterprises based on mutual interdependence and with only partial state control. The collapse of state socialism further reduced state capacities. The strategies of – as Burawoy puts it – “inaugurating a market economy overnight” and “cultivating capitalism by decree” required a supportive economic sector. This latter precondition was absent, and the “pillars of the Soviet economy were strengthened”, according to Burawoy.

The state socialist regimes' encounters with an unruly society did not only have impacts within the economy, but on the political life as well. Philip Roeder (1999), for instance, points at the importance of cohesive counter-elites during state socialism for the political development afterwards. Some state socialist countries had it, others had not. Valerie Bunce (1999) makes a similar observation by saying that “the social experience in some countries produced a liberal counter-regime-in-waiting”. For the development of the political landscape in the aftermath of 1989-91 these aspects played an important role. In some countries, like Poland and to a lesser degree, Lithuania, the one-party regime came to bear the stamp of its struggle with and against an unruly society (see Holm-Hansen 2002 a and b).

4.2.4 Civil society, trust and social capital in state socialism

The societal school within Soviet studies is not the only scholarly literature that is interested in society under state socialism. The wide interest in civil society in general social science since the 1970's has resulted in works focusing on civil society in Eastern Europe, no

longer only within area studies, but in mainstream social science as well⁵.

Civil society is a wide concept, which is used for a wide variety of analytical purposes. Lars Skov Henriksen (1994) has identified four main ways the concept is being used. First, there is civil society as a sector of the society as a whole: The family and basically local networks. Secondly, there is civil society as a residual, economic category in addition to the state and the market. Thirdly, civil society is a particular, sociological principle of structuring human relations, which is free from the hierarchical principles of the state and the money-based relations of the market. Here, it is based on voluntary participation; affectivity; mutuality/mutual solidarity as enjoyed in “families, communities, friendship networks, solidaristic workplace ties, voluntarism, spontaneous groups and networks” (Alan Wolfe, 1989: 20, as quoted in Henriksen, 1994). Fourthly, there is civil society as a political concept. Since the Enlightenment, civil society has been a central concept in the debate over the division of power between the state and non-state spheres of life.

A perusal of the literature on the society under state socialism reveals that all four ways of using the social capital concept are present. The first version of civil society, as depicted by Henriksen, is close to the “retreat into private life” (Sztompka 1996: 194) so prevalent under state socialism. The second way of seeing civil society (as a residual economic category) was and is present, at least nominally, in the region in the form of co-operatives for instance in agriculture. The third way of understanding civil society – as being distinct from the forces of production and from the coercive apparatuses of the state – is identical to Antonio Gramsci’s concept of the civil society, which he noted was absent in Russia (Simon 1982: 28, 69). The fourth way in which civil society can be seen (in the perspective of division of power) was followed up by liberal oppositional thinkers in East and Central Europe in the 1980s.

As for the concept of “social capital”, it is linked to civil society in the sense that it results from the voluntary participation in horizontal networks of civil society. Social capital is based on norms, networks

⁵. The works by Central European oppositionists of the 1980’s on state-society relations is not dealt with here, since their focus is on strategies against the repressive regime they confronted. Although still very relevant for political theory, not least since it still provides a distinctive quality to Polish and Hungarian liberal thought, this literature is not central to the problems treated in this thesis. For a sample: Michnik 1985, 1990, 1995 and Konrád 1985.

and trust, according to Robert D. Putnam, whose main point is that social capital increases the efficiency of the society by facilitating co-ordinated action without the use of an impartial third instance – the state. Such co-ordination is easier to achieve in societies where social capital has been accumulated (in the form of norms of reciprocity on general basis and networks for civic engagement). This is a highly relevant observation for the discussion of this thesis' main question.

It is often claimed that social capital is in deficit after state socialism and that it simply could not develop in that system. It is from the everyday contacts between individuals that norms, networks and trust – social capital – develop. It might therefore be interesting to take a look at studies of everyday life under state socialism. As noticed above, networks under state socialism developed in order to cope with the socialist shortage economy (Stark and Bruszt 1998). Money was not enough to get hold of goods. One also needed information about how and where to get the goods. Networks of alternative distribution emerged. Markku Lonkila (1999) argues that it was through these networks that social integration took place. This resulted in fragmented solidarity within “an archipelago of networks”.

Networks and informal agreements were not only confined to the everyday life of individuals and families, but similar practices were applied on a political and administrative level. There is a long tradition for making agreements in Russia, not least in local politics. In the journal of legal studies, “Iurist” (the Lawyer), Iu. G. Lezhikova (1998) argues that “fiduciary law” could play a role in the regulation of municipal economic activity. She warns against the belief that law can possibly regulate everything in Russia. Fiduciary law is law based on trust, moral norms, business norms, habits, and religious norms.

Basing oneself in practice on fiduciary law is nothing new to post-Soviet Russia according to Lezhikova, who claims that “under the years of Soviet power whole complex institutions, undersystems withdrew from law.” Fiduciary law had successfully regulated public relations in fields under consideration, and sometimes corrected positive laws (pozitivnoe pravo) given by the state.” The author explains this by giving the example of the multi-faceted sphere of fiduciary law. All this contributed to a strengthening of the public to the detriment of that of the state, according to the author, who interestingly holds the position of junior researcher (*ad' iunkt*) at the institute of management under the Ministry of the Interior. The author claims that fiduciary law often regulated questions pertaining to municipal economic activities, and very seldom that type of cases were brought to court. The author believes that fiduciary law still

could be used in agreements made by the local self-government (“dogovorit'sia po chistoi sovesti”).

This is not necessarily tantamount to initiating the process of transforming norms of reciprocity from specific to general, including people one does not know well, as required by Putnam. The reason to be doubtful is that the ruling circles (in the Communist Party) had “privatised the state”. Employees on every level of the state socialist bureaucracy took advantage of their positions in regulating people’s everyday life.

The Russian word “blat” refers to the use of contacts outside the normal, official ones to obtain certain goods. The concept is part and parcel with the state socialist shortage and system of privileges. Public resources were distributed to private use. Blat was disguised corruption, justified as “helping out friends”. It was considered less bad than bribery and clientelism, but therefore also more pervasive, according to one Russian researcher writing on the problem, Alina Ledeneva⁶. These are not “norms of reciprocity”, nor “horizontal networks for exchange of knowledge”, as required by Putnam.

Could “civil society” and “social capital” develop under state socialism? Very much in the same vein as Putnam, Sztompka (1996) emphasises “trust”, or rather “the culture of trust”. Sztompka makes use of “trust” as a precondition for proper and full utilisation of other resources (like entrepreneurship, citizenship, legalism and full exploitation of institutional opportunities emerging from the market, democratic polity and pluralistic thought). Sztompka refers to Niclas Luhman: Trust helps us reduce complexity and alleviate uncertainty by taking some aspects of (the socially generated aspects) of the future for granted.

Sztompka’s hypothesis is that the key to a robust civil society lies in the restoration of trust in public institutions (Sztompka, 1996:195). In other words, there is no zero-sum game between state and society. Trust in the state strengthens civil society, according to Sztompka. In the same vein, distrust in and withdrawal from the state – what could be termed “non-economic privatisation” – could be seen as symptoms of state socialist inability to create a bond between citizens and the state. People idealised the private and negated the public. The affirmation and idealisation of the “private” consisted mainly in a retreat into the family as being understood as an authentic civil

⁶ As referred to by Lonkila: Ledeneva’s book is titled “Russia’s economy of favours: Blat, networking and informal exchange”, Cambridge: Cambridge University Press, 1998.

society. The negation of the “public” leads to “internal emigration” and “parallel” political activity (Sztompka, 1996: 194). This pathological “culture of distrust” emerges from the communist legacy of the “civil society in conspiracy”, where the state is pictured as entirely alien (not a nation-state, but a nation versus a state).

Sztompka claims that “social life does not allow for a vacuum. If trust decays, some other mechanisms are apt to emerge as functional substitutes for trust, satisfying the universal needs for orderliness, predictability, efficiency, fairness etc.” (Sztompka, 1996:199). Lack of trust may lead to several types of reaction. A net of reciprocal favours may replace the sane tissue of social bonds, which creates a sense of predictability and order. Taking the law in private hands is another reaction to lack of trust. So is ghettoisation, which consists in compensating the diffuse distrust in the wider society by strong loyalty to tribal, ethnic or familial groups. Moreover, distrust in the indigenous state may lead to externalisation of trust, i.e. trust in foreign societies, leaders, organisations, policy instruments.

Sztompka deplores the civil society in former state socialist countries as being continuations of the civil society in conspiracy that the “we-them” dichotomy still prevails despite the introduction of democratic procedures. He focuses on the pathology of the societies that are left over from state socialism, which means that he publishes within the mainstream of authors describing post-socialist societies as merely defunct. What about the opposite perspective? One could imagine that a political and economic system like the one practised in Eastern and Central Europe after World War II, required strong social skills among people in order to survive. The repressive character of the state socialist system made people clearly aware of who was trustworthy. Trust emerged, of course personalised trust, but nevertheless trust.

4.2.5 Science and environmental knowledge in a Soviet context

State socialism emphasised the role of science in the development of socialism toward communism, a process postulated to be of a scientific, rule-like character. The entire Soviet project was held to be based on science. The role of scientists was to describe and further this process.

The leadership in the Soviet Union even introduced a special amendment in Soviet Marxism to treat science as an important part of the forces of production in society (Shlapentokh, 1990:9). This was

the theory of the “scientific-technological revolution”. The scientific-technological revolution gave a new and higher status to knowledge since the 1960s, whereas quasi-religious and deterministic references so prevalent in Communist rhetoric until then were downplayed.

The “mass intellectuals” – operationally defined as those with graduate or post-graduate degrees – constituted the backbone of this Soviet revolution. The group of scientists and scholars, most of them on a high professional level, amounted to some 500,000 individuals by the mid-1980s (Shlapentokh, 1990: x).

Not surprisingly, under state socialism the role of scientists and intellectuals was a complicated one. Several authors, among them Boris Kagarlitskii (1989) and Vladimir Shlapentokh (1990), have written on the relationship between Soviet intellectuals and the regime. The great discussion on the projected re-routing of Siberian rivers to the south, the building of the BAM (Baikal-Amur Mainline) railway and the proposed construction of two cellulose factories at Lake Baikal are some of these environmental cases in which experts were involved, providing arguments for both sides. In an impressive overview of Soviet environmental policy, Charles Ziegler as early as 1987 claimed that “environmental expertise is one of the most important resources for environmental groups” (1987: 67). This he explained by the belief in the scientific-technological revolution. Even if it is difficult to estimate the exact figures, Ziegler says that the number of personnel working with environmental protection increased, as did the political weight of these institutions, from the 1960s onward.

The role of science under state socialism left behind a particular legacy which is noticeable in most policy fields, not least environmental protection. The legacy consists in technocratic approaches with roots in the core idea of the state socialist system, which was to modernise a seriously backward society by forcing technological development while restraining society.

Engineers, not manual workers, were the social backbone of state socialism. The prevalence of technically trained personnel, highly educated, is one of the most characteristic remnants of that system. As a logical consequence of what has been said in the sub-chapters above, state socialism did not create a fertile ground for human or social sciences. State socialist “knowledge” was based on “exact sciences”.

Several outstanding scholars were able to contribute to the international scientific community, but their works could not be received in their own countries. Applied social research was also

quelled. Human and social sciences were mainly made use of to underpin ethno-national dogma on the Soviet Unions' many ethno-territorial units and to pursue planning, but could hardly develop into a basis for critical self-reflection on the part of the society and the authorities.

Science was understood narrowly as natural science. Social sciences like sociology, anthropology or economy have played an inconsiderable role in the debate and research connected to environmental protection. This contributed to the incapacity of the Soviet system to deal with debate and disagreement, and hampered the application of science in policy formulation and implementation. This incapacity hindered the development of knowledge on the impact of political, economic and social phenomena on the environment.

The result of all this is still visible today. In the transitional countries of Europe there is a very strong propensity to tackle any problem technically, or by reference to natural science. Complex problems are reduced easily to questions of technical knowledge or natural science. In the sphere of environmental protection, this tendency is perhaps even stronger than in other spheres (Holm–Hansen 1996, 1997).

This is of relevance when studying the use of NEPIs since these latter presupposes an ability to make use of social science, combining social and natural science, accepting subjective protests, discussing decision-making processes, and cope with openness. The linkage of insights from the social sciences and the natural sciences that characterises ecological modernisation in general and NEPIs in particular is unlikely to take place easily. Therefore, epistemic communities to underpin NEPIs will not be strong in former state socialist countries.

4.3 Summing up: Theories on transition countries and relevance for the introduction of NEPIs

The purpose of going through the scholarly literature on the political and social developments of Russia and Latvia has been to give a broad background to the analysis of what settings the new policy instruments are transposed into. Because NEPIs are related to the broad shift to governance and the sector specific shift to ecological modernisation they require an elaborated set-up of institutions in the broad sense of the word. Assessing their prospects, therefore, requires not only insight into what organs and what legal arrangements that support the

use of the new instruments, but also insight into the less visible kind of institutions, like expectations, networking, informal contacts, ideas of right and wrong, epistemic paradigms, tolerance to hierarchy and others. This latter type of institutions have developed over time, and unlike laws and administrative organs, seldom change overnight. However, also choices made at critical junctures and developments taking place over time create and transform institutions. Therefore, understanding the institutions requires a perusal of the various branches of scholarly literature on Russia, Latvia and state socialism.

First of all, it was necessary to take a stand in the issue of the general versus the particular. Traditionally studies of Russia and other state socialist countries used to look into particularities without trying to generalise beyond the case. This position has been challenged by authors wanting to generalise with the help of studies of post-socialist countries. This debate is of great concern for anybody who wants to study – or actually bring about – the introduction of new ways into the societies in question. One would most probably be cautious or even pessimistic if one believes that the country into which e.g. a new policy instrument is introduced is loaded with particular features differing from those in the instrument's country of origin. Likewise, if one believes that law-like mechanisms are likely to be set in motion despite the actual country's idiosyncrasies, introducing a new policy instrument would cause less doubt. It is argued in this thesis that the two strands should be combined. General patterns are discernible across different cases or countries, but they are only detected as a result of in-depth analysis of each case's particularities.

Furthermore, this chapter has shown that it is necessary to make clear whether one perceives Russia and the Soviet Union as totalitarian or alternatively as countries where the society despite all authoritarianism and repression played a role. Among adherents of totalitarianism there is one position that holds Russia to be basically "Asian" and one that sees Russia as primarily European (only with the Soviet epoch as a primitive intermezzo. For the prospects of a new policy instruments developed under European (including North American) conditions the two positions open up for diverging expectations. If Russia is "Asian" (defined as lacking traditions of private ownership; urban self-government and mutual obligations) the institutional surrounding for new policy instruments may be bleaker than if Russia is European, only somewhat less strongly so than France or Britain. Just like in the discussion over generality versus particularity, the "Asian" and the "European" perspectives differ as to what degree of optimism they engender. It is easier to make an instrument developed in Europe work in a Russia that shares some

institutional features with Europe than a Russia based on Asian features. On the other side, neither of the two perspectives inhibits Russia from developing the necessary institutions.

In addition, there is the distinction between totalitarian and societal perspectives. The totalitarian ambitions of the power-holders in the Soviet Union were strong, but did that make the state everything and the society nothing? For the understanding of the transition period an answer to this question is of importance. Was there a lack of society at the outset of post-socialism, or was there a society marked by enterprises', groups' and individuals' strategies for survival under state socialism?

If the totalitarian approach was right, newly established organisations and institutions will be most significant. In case the societal perspective is right in suggesting that state socialism unwillingly enforced an informal society to keep the wheels in motion, this society probably created institutions that are already deeply embedded and not easily effaced. The literature on civil society under state socialist conditions may serve as a warning against a too strong belief in smooth and trust-based interaction between state and society. New policy instruments will have to operate amidst the existing institutions.

This thesis bases itself on the societal perspective, i.e. the view that events, choices and developments in each of the state socialist countries has had a bearing on the settings in which new policy instruments operate. The decades of state socialism left behind institutional practices that differ from country to country. State socialist countries differed as to the degree to which their citizens had got used to debate, economic actors had been autonomous, a civil society had been able to emerge and science had been allowed to link up with social forces. This makes up the formal and informal, visible and less easily discernible institutions that make up the setting in which NEPIs operate.

NEPIs are born out of the idea that environmental management is a continuous interaction between groups and forces in society, public and semi-public organisations, institutions and authorities, private actors and interest groups. They presuppose autonomous actors (policy actors and target groups), market-like organisation of the economy, target groups willing to take on responsibilities, an ability among actors to interact non-hierarchically, and the existence of an epistemic community to underpin modern environmental protection. In other words, they presuppose the existence of a set of institutions in the wide sense.

The scholarly literature on the Soviet Union, Russia and Latvia – totalitarian as well as societal – imprints the reader with a certain doubt that these institutions will be present in the post-Soviet, transitional country in a form that makes them underpin NEPIs. On that background the three main assumptions of this thesis were developed.

5 On case study method and the use of context

When studying, like it is being done in this thesis, the introduction of a policy, a programme or an instrument to a new context (country, region, or city), it does not suffice to know the policy or instrument in detail. One must also be able to analyse the setting into which the policy or instruments are installed. Therefore, the thesis is based on one simple methodological assumption, which states that the surroundings do interfere with the study object.

When researchers say that context matters, they tend to choose case studies in one way or another. They believe that, at least at times, research will suffer from trying to insulate the study object from its surroundings. Apart from this, the researchers using case and context differ in their epistemological beliefs.

Below, some contributions to the literature on case studies will be presented in order to find out what the authors have in mind when they refer to *context*. This endeavour in itself requires some sensibility to context. Each author writes about case studies and context in a given setting, which is very much characterised by his own research objectives. These objectives are formed by the epistemological orientation of the author. Therefore, differences in research objectives between the authors will be discerned. Furthermore, the various ways different authors see relations between case and context will be described, and an account will be given of the ways the authors make use of context to reach their research objectives.

In case studies the role of the researcher may differ from that in variable-oriented research in the sense that the he or she may be “personal” or subjective not only when defining relevant research questions and operationalisation and in the interpretation at the end, but all the way through the research process. This will be treated in subchapter 5.6 below. Likewise, causal versus intentional explanations in case studies will be discussed. Finally, the various ways of

conceiving case studies will be related to the needs of this thesis. Among others the concepts of “case” and “context” will be supplied with “phenomenon” and “site”.

5.1 Robert K. Yin – analytical generalisation

Robert K. Yin’s objective is to cope scientifically with situations and research questions that do not permit the use of traditional social science techniques. In one widely used practical manual – Case Study Research: Design and Methods – Yin (1994:3) recommends case studies when one wants

“to retain the holistic and meaningful characteristics of real-life events – such as individual life-cycles, organizational and managerial processes, neighborhood change, international relations, and the maturation of industries”.

It is, however, worth noting that it is not because Yin does not dispose of a “large enough” number of study units (the so-called «small N» problem) that he applies “holism”.

Although talking about holism and real-life events, Yin’s objective is to link case studies, and the awareness of context, to the traditional schools of social science based on the epistemology of empiricism. He seeks to develop theory and produce generalised knowledge. Yin believes facts can be found. Yin’s approach is inspired by the physical and natural sciences, and may be termed empiricist, or even positivist. These traditions usually are associated with quantitative, variable-oriented research.

Often in quantitative research the analysis tends to be undertaken statistically by extracting a small number of variables from a large number of cases – and from the concrete contexts – in order to depict the relationship between these variables. This means that sometimes in social science context does not, should not and cannot matter much. One is looking for the general picture as it manifests itself across a large number of instances. Case studies may fall short of extracting a general picture beyond each particular case. Yin, however, makes use of them to reach generalisation and he is not the only scholar to do that. Other scholars too, make use of case and context to find causes and reach generalisation.

Yin’s ambition is to generalise from case studies. Of course, the generalisation resulting from this kind of studies cannot easily be

statistical. Case studies and experiments, Yin claims, do not bring *statistical* generalisation, and therefore do not have to be made in large numbers. Case studies, like experiments, lead to *analytical* generalisations, «in which a previously developed theory is used as a template with which to compare the empirical results of the case study» (Yin, 1994:31). This is what makes Yin's cases more like "experiments" than the "sampling units" made use of in statistically oriented studies. Yin likens his own use of them to that of experiments in the natural sciences.

5.1.1 Relation between case and context according to Yin

As we saw above, Yin claims that some research questions (dealing with issues that are close to "real-life events") call for special methods. Usually in these cases the researcher asks "how" and "why", not "how much" or "how many". Yin says that questions beginning with «how» and «why» lead the researcher in the direction of three research strategies. First, there is experimental design where the researcher controls behavioural events and focuses on contemporary events. Then there are historical studies where the researcher is totally cut off from any influence on events and where the event has already taken place. Third, there is the case study where there is no control over behavioural events, and where events are contemporary. This latter situation invites the researcher to deal closely with a context that must be analysed and understood together with the phenomenon – the case – under study:

"A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. In other words, you would use the case study method because you deliberately wanted to cover contextual conditions believing that they might be highly pertinent to your phenomenon of study" (Yin, 1994:13).

The phenomenon and the context are brought together as a case to be studied. There is no sharp line to be drawn between the phenomenon (some would call it the case) and its context. However, as argued by Yin, *in the analysis* such a line must be drawn.

Yin's own background is from experimental psychology, in which one individual serves a case. Nevertheless, Yin opens up for treating

policies, programmes, decisions, and implementation processes as cases provided the beginning or end points of the case are sharply defined (Yin, 1994:22). He illustrates this point by referring to the frequent blurring of the distinction between the neighbourhood as an “*area*” and as “*small group*” in case studies. What one really tells about the phenomena one studies in the neighbourhood, clearly depends on how the neighbourhood is defined.

5.1.2 How Yin makes use of context to reach the objective

Judged from this, initial, statement by Yin one would expect a further discussion of what contextual conditions really mean, and not least, since Yin’s book is a practical manual, some guidance as to how context should be treated. Although discussing, and for practical needs even solving, several methodological problems connected to conducting case studies, Yin does not follow up much what it takes “to cover contextual conditions” in practice, but he makes clear that case students have to stay alert all the way through the research process. The awareness of context in case studies creates a specific closeness between theoretical issues and the data collected. Research will offer unexpected opportunities, contradictory evidence, a need for listening capabilities, and an unbiased and unprejudiced attitude. There is no place for the traditional, relatively inexperienced research assistant in case studies, nor for routinised data collection (Yin 1994: 55-56). Having said that there is reason to be sensitive to the relation between the case and the context one must be ready to meet unexpected occurrences and connections throughout the research process. More on this is presented below in the sub-chapter on the relation between the researcher and the study object.

There is ambiguity throughout Yin’s book. As we saw, advocates case studies in general as a good choice for those “who deliberately want to cover contextual conditions as pertinent to their phenomenon of study». Nevertheless he narrows the practical use of case studies to contemporary phenomena where the delimitation between phenomenon and context is not clearly evident (Yin 1994:13).

Certainly, case studies could be used also for phenomena that are not contemporary, as well as they could be chosen for studies where experiments could have been feasible, but Yin confines his case studies to contemporary phenomena in their real-life context. Therefore, in practice, Yin seems to be covering contextual conditions as a “last resort”. He ventures into the context because the context

“has invited itself” and it is not possible to get away with it. However, when Yin finally makes case studies, context is brought in because it is important for the understanding of the case. For Yin, sometimes case and contexts are inseparable, and the researcher cannot understand the case without understanding how it is related to its environment.

On the other hand, Yin’s preference for replication logic, and in particular “pattern-matching” makes him withdraw to some extent from the “real-life context” of each particular case to the benefit of a focus on the elements within the cases that are compared. Yin holds «pattern-matching» of case to theory and replication of case studies to lead to external validity. Pattern matching means that an empirically based pattern is compared with a predicted one. This comes close to testing hypotheses, but the chronological sequence is worth noting – the empirical finding comes prior to the predicted pattern. Based on prior work with theory a pattern of «scores» on the dependent variables is predicted. These dependent variables may for instance be «the effects of a reform». If expected (according to the theory) results are not empirically supported, the theory must be rejected or revised. This is why Yin likens his method to that of experiments among natural scientists.

Yin’s case study method is basically testing hypotheses by doing case studies. By replicating case studies – which in a sense means comparing them – external validity is sought (generalisation). But by replicating Yin also turns his back on those case students who seek knowledge mainly from one case (like Stake below). Yin’s pattern-matching and replication is made in order to find general patterns about basically the same phenomenon across settings, or contexts, and less how the unique case is composed of different parts being in interaction with the surrounding environment.

5.2 Robert E. Stake – the intrinsic study of a valued particular

Another scholar writing on case studies, Robert E. Stake, shares Yin’s fascination with that method, but where Yin seeks to generalise, Stake applies a hermeneutic, or interpretivist, epistemology. Where Yin prefers to replicate case studies, Stake prefers *“the intrinsic study of a valued particular”* (Stake, 1994: 238). These are undertaken to gain better understanding of this particular case. In his book – *The Art of Case Study Research* (1995) – Stake explains that the case is chosen

because we want to understand it, not because we want to use it neither as a "representation" nor an "illustration" of other cases.

For a researcher who emphasises the importance of *meaning*, like Stake does, looking carefully into context is an obvious choice. One would like to know what the phenomenon under study means for someone, somewhere at a certain time. Therefore, Stake aims at generalisations made by the readers themselves. This he terms «naturalistic generalisation», defined as «conclusions arrived at through personal engagement in life's affairs or by vicarious experience so well constructed that the person feels as if it happened to themselves» (Stake, 1995: 85).

In order to get vicarious experience the reader needs a well-written narrative description of the case. This may be a narrative account, a story, a chronological presentation, or a personalistic description. Emphasis on time, place, and person are the basic three ingredients of such a report (Stake, 1995:86-87).

5.2.1 Relation between case and context according to Stake

Stake's "case" is a complex entity that is operating within a number of contexts. Stake's "holistic" approach is applied first of all for the study of the internal complexity of the case and less for the study of the relationship between the case and its external surroundings, or context. Where Yin would use case study methods deliberately to cover contextual conditions because they are relevant, Stake underlines the importance of demarcating the case. The case is, in Stake's words, a bounded system, a functioning specific, an integrated system, the intrinsic study of a valued particular, an object more than a process, and the more it is separated the greater the usefulness of Stake's epistemological rationale (Stake 1994:237; 1995:2). Unfortunately Stake does not elaborate on this.

5.2.2 How Stake makes use of context to reach the objective

Stake's cases are separate entities, but they should nevertheless be studied in their context. The nature of cases, Stake says, is "situational and influenced by happenings of many kinds" (Stake 1994:239). This insight should be used in order not to seek causes, but to uncover

coincidence of interrelated events, some of them being purposive, some situational.

Stake holds the “particularity of the case” to be important “to understanding”. The uniqueness of a case is not to be treated as “error” (Stake 1995:39).

Stake makes use of context to gain knowledge. Unlike most quantitative research, which generalises by neutralising contextual, situational factors Stake suggests that one should look into “co-existing” happenings so to speak “surrounding” the case. These are complex events of which no one can tease out the causes, but nevertheless the happenings can be understood. How? Making use of the standard dichotomy between “quantitative” and “qualitative” methods Stake says: “To sharpen the search for understanding, qualitative researchers perceive what is happening in key episodes or testimonies, represent happenings with their own direct interpretation and stories (i.e. narratives). Qualitative researchers use these narratives to optimize the opportunities of the reader to gain an experimental understanding of the case” (Stake 1995:40).

Stake makes an interesting comparison between quantitative and qualitative research as to when in the research process the two methods allow for interpretative work. Quantitative researchers do that in the initial and final stages of research, leaving the meantime “value-free” and not open for changes in the course of the study. Qualitative researchers, on the opposite allow interpretation to play a role throughout the research process: “Situational conditions are not known in advance or controlled. Even the independent variables are expected to develop in unexpected ways” (Stake 1995:41). This resembles Yin’s pointing at the demanding task of case researchers living with a permanent interrelationship between theoretical issues and the data they find as they find the data. And even more it joins the concern of Charles S. Ragin who – as we will see below – shows how unexpected situational conditions can be taken into account throughout even a study involving a large amount of cases (by “fuzzy-sets”).

Stake applies a definition of “generalisation” that is clearly influenced by his background in educational sciences. It differs dramatically from Yin’s. Stake’s hermeneutic and constructivist basis makes him focus not only on how generalisations are made by the researcher who writes the case report, but also how the *reader* makes his/her generalisations when reading the report. The first type of generalisation is termed «explicated» because it is received from

others, usually teachers, parents, authors. Stake's generalisations – «naturalistic generalisation» – are arrived at by the readers themselves through vicarious experience. In other words: Naturalistic generalisations are generalisations formed by people themselves based on their own experiences. The question of how to generate vicarious experience remains. Here descriptions of context (e.g. physical conditions, home, or family) are of help (Stake 1995: 63). This is a highly original use of context.

Where Yin says that context matters because there are no strict borders between the case and its environment or such borders are impossible to establish since the case is contemporary and real-life in character, Stake says that cases must be clearly distinguishable from their contexts. For Stake it is first of all the *internal complexity* of the case that must be analysed, not its relation to the environment. This does not exclude interest in the context. Context matters in Stake's case studies as well because cases, even if sharply defined as a bounded system, are influenced by the situation in which they find themselves. Furthermore, Stake makes use of context to develop the kind of understanding the readers of his studies need in order to be able to generalise.

5.3 Charles S. Ragin – through context to causes

Just like Yin and Stake, Charles C. Ragin argues for bringing the context in. *Ragin makes use of the context to find causes*. Where Stake contrasts quantitative to qualitative method, Ragin makes a similar pedagogic manoeuvre by contrasting variable-oriented to case-oriented research, but unlike Stake he wants to bridge the gap. In variable-oriented research, the goal is to explain the co variation of one variable with another, usually across many, many cases (Ragin, 1994:107). Case-oriented research, on the other hand, seeks to *determine the different contexts in which a cause influences a certain outcome* (Ragin 1987: vii).

Each of the two strands is in danger of losing major insight, according to Ragin. The variable-oriented researcher may lose necessary insight drawn from the knowledge of and sensibility to context whereas the case-oriented researcher may risk getting lost in context. Ragin suggests a middle path by seeing cases as “interpretable combinations of elements” and “cases as different configurations of a specified set of attributes” (Ragin, 2000: 66). This

opens up for comparisons of the attributes, and thereby also analysis based on relatively in-depth insight into a relatively large number of cases. This is the “fuzzy-set” approach. Robert E. Stake’s objections to comparisons were based on a fear of focus being distorted from the case to the elements that may be compared. Fuzzy-set demonstrates how this could be overcome (see below).

5.3.1 From case to causes in the literature

Cases are not only used by researchers interested in intentions and meanings. Ragin is not alone to argue that for researchers interested in causal explanations in the sciences of man and the man-made the case study can prove useful as an alternative, or supplement, to purely logical considerations and statistical analyses of a large number of units. When looking for causes the link between alleged cause and observed effect must be identified and explained.

In order for causes to become «complete explanations» one has to know (about) the mechanism that originated the phenomenon and the circumstance that let the mechanism be set in motion (Malnes, 1997:72). In the nomological-deductive method developed by Carl Gustav Hempel the concept of "circumstance" plays an important role. Following universal laws, provoking factors (causes) set events in motion under specific circumstances:

”In every case where an event of a specified kind *C* occurs at a certain place and time, an event of a specified kind *E* will occur at a place and time which is related in a specified manner to the place and time of the occurrence of the first event” (Hempel, 1965: 231-2).

Ragin makes a similar point on “combinations of causal conditions” (see below). In order to find out whether the causes (did) play the expected role and whether the circumstances really were/are present and significant, case studies are applicable and useful. In other words, one has to ask not only *why* things happen, but also *how* things happen. How did the mechanism work under the given circumstance?

Following Max Weber, who argued that causal explanation and intentional explanation did not rule each other out: intentional explanations of the actions of social actors were considered able to co-exist with causal explanations of the course of events (Gilje & Grimen, 1993: 165). Both types of explanation can form parts of one case study. The case study seeks to explain a case with its complexity, and usually may include both an analysis of the intentions of the

actors and a search for laws regulating the possible outcomes of events within the case. In other words, both types of explanations can be contained in a case study. (This, however, does not necessarily mean that case studies are equally suited for being part of a causal explanation or an intentional explanation).

As pointed out by Phillips (1991) hermeneutic approaches, even being useful for some purposes, can not be applied for all studies. Some branches of the social sciences operate with aggregates of individual choices and treat them mathematically presupposing a set of things about the intentions of the large group of individuals included in the study. However, also in other social sciences, like political science and anthropology, sometimes, or often, researchers look at consequences of human action. Sometimes these consequences are unintended. For unintended effects, it does not make sense to look for the intentions. This certainly is a truism, but Phillips nevertheless found it worth emphasising. For our discussion on the applicability of case studies, it might be worth noting that unintended effects per definition are discovered *ex post*. For instance, why did the reform or policy *not* work as expected? To give an answer to this question a case student would look at the reform/policy - or more archetypically, the object that was to be reformed (school, enterprise) - and study it in its context. By scrutinising the case carefully, causes will be found. These causes might be general or situational.

Goldthorpe objects to the holistic approach of some case students by referring to the so-called problem of the Black Box. When the cases are left «untouched», not decomposed into «variables» it is possible to give good answers on «what happened». This, however, Goldthorpe adds, is not the same as giving a theoretical explanation of what happened. And he adds that the causal processes cannot be directly observed; they have rather to be derived from theory (Goldthorpe, 1994: 14).

5.3.2 Relation between case and context according to Ragin

According to Charles C. Ragin cases are not empirical units or theoretical categories, but products of basic research operations (Ragin, 1992: 218). According to Ragin:

"... the continuous web of human social life must be sliced and diced in a way compatible with the goal of testing the generality of theoretical ideas, and comparable

objects of research must be established so that boundaries can be placed around measurement operations" (Ragin, 1992: 219).

Ragin terms this process "*casing*" to denote the research tactic that takes place throughout the research process in order to link ideas and evidence, theory and data.

Case-oriented researchers look upon the case as a whole whose parts are combined in different ways. Ragin's cases are viewed as *configurations*, or combinations of characteristics. Ragin says that "... the relations between the parts of a whole are understood within the context of the whole, not within the context of general patterns of co-variation between variables characterising the members of a population of comparable units" (Ragin 1987:x). Furthermore Ragin says that: "The logic of the case study is fundamentally configurational. Different parts of the whole are understood in relation to one another and in terms of the total picture or package that they form" (Ragin 2000: 68). What are the parts? Ragin mentions: "institutions, path dependencies, social structures, historical patterns and trends, routine practices, singular events, event sequences, connections to other cases, the case's larger environment, and so on" (Ragin 2000: 68). We would term this the *internal context*. In itself this point of departure – that cases are interconnected wholes – is not tantamount to saying that context matters, at least not if one defines context as being basically external to the phenomenon one studies. Holism can be a pretext not to look at context in its external meaning, but rather concentrate merely on the internal composition of the case.

Since case-oriented researchers conceive of the case as a whole they are not looking for frequencies as in variable-oriented research. Rather they are trying to find the "*variety* of meaningful patterns of cause and effect" (Ragin 1987:52). These combinations may be interpreted and compared to combinations found in other cases. Doing this one must be sensitive to "time, place, agency, and process" (Ragin 1987:11). These are the main elements of what we would call Ragin's *external context*. Such a sensitivity help the researcher end up with historical and concrete explanations that stand in connection to social and political issues to much larger degree than the abstractly causal explanations offered by variable-oriented methods. The case-oriented method forces the researcher into contact with human agency and process (Ragin 1987: ix).

As we see, in order to understand the case Ragin makes use of context in two different ways, first about the *internal* configuration of the

case, then about the *external* circumstances around the case. This may prove to be a useful distinction in concrete studies of cases, especially when the interrelations between external and internal contexts are analysed.

5.3.3 How Ragin makes use of context to reach the objective

As noted above, Ragin draws on insight in the context to detect causes. A main reason one might consider using case-oriented methods is, according to Ragin, that one is not satisfied with the abstract and broad empirical generalisation made in variable-oriented research. Especially when one is studying a significant historical outcome case-oriented research is suited (Ragin 1987:11). Doing this, he inverts the argument that cases do not offer observation of causes. Ragin looks for the *combinations of conditions* that create the causes of interest to the social scientist. Social causation is “often both multiple and conjunctural, involving different combinations of causal conditions”. Sometimes what was identified as the cause in one case may prove not to be in another. It is all dependent on the context (Ragin 1987:27).

There is a danger of drowning in the context and often critical voices are raised against case studies for not being able to produce robust generalisations. These voices say that case studies cannot and does not want to tell about more than the single case. They neglect to look for causes and effects, it is being said. For instance Robert E. Stake’s “naturalistic” generalisation, described above, is based on each reader’s own, subjective associations and will hardly pass the test of traditional social science. Robert K. Yin’s “analytical” generalisation is less criticised since one of Yin’s objectives is to make case studies understandable to practitioners of mainstream quantitative research.

Charles C. Ragin says that case studies are good for finding *how* something comes about but not for assessing the generality of it. He himself cannot be criticised for forgetting about causal generalisation for the sake of the properties of the individual case because it is exactly in the study of the configuration of each case that Ragin seeks the relationship between causes and effects. By suggesting “fuzzy-set” to study causal complexity he combines looking at a larger number of cases that is usually done in case studies, with keeping the boundaries and definitions of the cases permanently ready to be revised. This way the strength of quantitative approaches – which lies in their ability to generalise – is combined with the strength of qualitative approaches –

which lies in their capacity to be open-minded as to what the case really is. This latter capacity is based on sensitivity to context.

5.4 Glaser and Strauss – data live in the context

Barney G. Glaser and Anselm L. Strauss (1967:14) argue that theory must be taken from "data rather than from the armchair". Theorising from data is, according to the authors,

"in contrast to the risk of testing a logico-deductive theory, which is dubiously related to the area of behavior it purports to explain, since it was merely thought up on the basis of *a priori* assumption and a touch of common sense, peppered with a few old theoretical speculations made by the erudite" (Glaser and Strauss, 1967: 29).

This type of theory, based on insights drawn from the case one studies, is called *grounded theory*. Glaser and Strauss take for granted that one will need to compare to discover and generate theory. One single case can indicate a general conceptual category or property; a few more cases can confirm the indication. However, the researcher is not supposed to know the whole field or to have all the facts from a careful random example (Glaser and Strauss, 1967: 30). What cases, and how many, remain open questions until the research has been completed. The careful selection of cases on beforehand is not required. Instead one should pick new cases as a part of the research process, and as a result of theoretical insight generated from the study of the initial case, or cases. Cases should be chosen according to one criterion: whether they are fruitful for the elaboration of the theory. This is "theoretical sampling", summed up by Charles C. Ragin (1994:98) as "the process of choosing new research sites or cases to compare with one that has already been studied". The ambition of Glaser and Strauss is to develop new theory from empirical findings.

5.4.1 Relation between case and context according to Glaser and Strauss

To a large extent Glaser and Strauss let the cases live their own lives in their own contexts:

"Data collected according to a pre-planned routine are more likely to force the analyst into irrelevant directions

and harmful pitfalls. He may discover unanticipated contingencies in his respondents, in the library, and in the field, but is unable to adjust his collection procedures or even redesign his whole project. (...) If he varies his task to meet these unanticipated contingencies, readers may judge that his facts have been contaminated by his personal violation of the preconceived impersonal rules. Thus he is controlled by his impersonal rules and has no control over the relevancy of his data, even as he sees it go astray" (Glaser and Strauss, 1967: 49).

Glaser and Strauss do not stick to the criterion of strict comparability, in the sense that certain factors must be held constant. Practitioners of verifying theory claim that it is necessary to "purify" cases (groups) by holding strategic facts "constant" so as to exclude spurious factors from influencing. According to grounded theory, empirical evidence is "constructed" into cases of phenomena, as for instance mismanagement or inertia. The case does not speak for itself. It serves its purpose only through theoretical and conceptual processing. This is not to say that the case should not "be allowed to express itself freely". Glaser and Strauss suggest that the researcher studies the case in a state of being as unbiased as possible, among others by not having an eye on other literature about the case, nor relevant theoretical contributions. Reading is useful for the researcher, but only after having acquainted him-/herself with the case (Glaser and Strauss, 1967: 37).

5.4.2 How Glaser and Strauss make use of context to reach the objective

For Glaser and Strauss, then, it is necessary to be ready to accept that there is a context around the case that must be allowed to be taken into consideration when the researcher is developing his theory. Glaser and Strauss are in favour of carrying out several case studies in order to strengthen the theories under development. Discovering and generating theory from data means letting theories be systematically "aired" in various contexts in order to make the new theory robust. This is how Glaser and Strauss make use of the *context* even if they seldom use that word. Doing this they produce what Michael Burawoy (1991) (presented below) has termed *generic explanation*, i.e. explanations of a class of phenomena, not the single phenomenon.

Studying the same phenomena (more or less) in several settings implies focusing on the phenomenon, or class of phenomenon. If the

theoretical assumptions made by the researcher about the phenomenon “survive” throughout the settings, the theory can be considered more robust than if the change of settings showed that phenomena behaved in unexpected ways. This means that Glaser and Strauss believe that the phenomenon has a “core”, and that the core is more interesting than the relation between phenomenon and context.

5.5 Michael Burawoy and historically specific causality

Michael Burawoy opposes the very starting point of Glaser and Strauss, who hold that facts lead to theory. According to Burawoy it is very much the opposite – theory helps us establish facts. Burawoy terms his own approach “extended case theory”. Extended case theory does not seek abstract laws, but *historically specific causality* (Burawoy, 1991: 281).

“Embeddedness” is a core concept in extended case theory. This theory is less interested in explaining a class of phenomena (*generic* explanation) than in producing *genetic* explanation, i.e. explanations drawn from knowledge of the *origins* of the case, whether it is the historical past or the social context in which it is embedded. It seeks to explain particular outcomes. The case is important because it may tell us about the world in which it is embedded. In other words, extended case method seeks to know the society in which the case is embedded rather than the population of similar cases. Seeking generalisation “based on the likelihood that all similar situations have similar attributes” (Burawoy 1991: 281) is what grounded theory and most mainstream social science do. Burawoy’s alternative to generalisation by abstraction from time and place is to explain particular outcomes of “historically specific constellations of forces” (Burawoy 1991: 281). The use of context differs significantly between the two strands.

5.5.1 Case and context relationship according to Burawoy

Burawoy argues that as grounded theory designs cases in order to find similarities in the dissimilarity one abstracts, Burawoy maintains, not only from time and space, but one simplifies the case (social situation) itself. This easily leads to simple, linear types of causal explanations making use of variables. Extended case theory, on its hand, pays attention to the complexity, depth and thickness of a social situation,

Burawoy maintains. Causality, then, is characterised by "*the indivisible connectedness of elements*". The case is tied to – not abstracted from – its context (Burawoy, 1991: 280).

5.5.2 How Burawoy makes use of context to reach the objective

If Burawoy's approach is contrasted to that of Glaser and Strauss (just like Burawoy does himself), we see a clear distinction between methods. The latter use settings – context – as locations for making recurrent patterns of social behaviour reveal themselves (generic approach) whereas Burawoy treats settings as specific outcomes, interesting in themselves (the *genetic* approach). When looking for generic explanations it is useful to study the same case in several settings. This way the researcher may seek out similarities in the "core" of the cases across different settings. As noted by Burawoy with some abhorrence there are researchers who even set out to find "laws of human nature" this way (Burawoy 1991: 281). Such laws may be sought across contexts, e.g. in different towns or cities. For Burawoy, the town or city would be "a constellation of institutions located in time and space that shape domination and resistance", not "an arena where laws are played out" (Burawoy 1991: 281). Here Burawoy points at a fundamental difference in the way case students use context, or setting. Burawoy and Stake stand against Glaser and Strauss as well as Yin, whereas Ragin pursues the task of bridging the gaps.

The reason put forward by Burawoy (1991) to prefer extended case method to grounded theory resembles the reason why Robert E. Stake preferred to study one or more cases without explicit comparison. Both grounded theory and comparisons implies abstracting from time and place, i.e. the context. Focus is on similarities between seemingly different cases. This is, according to Burawoy, to obscure "the specific contextual determinations of the social situation" (Burawoy 1991: 274). Because Burawoy believes in contextual determinations of a given social situation focuses on *dissimilarities*. He tries to find differences between seemingly similar cases. This is the opposite of abstracting from time and space. It is looking at actors and institutions in a concrete time and space to find what is particular to the case. The specific historic context that shape the phenomenon we study is constitutive to extended case method, Burawoy says (1991: 279). This context is macro. It is the general that shapes the particular.

When believing in, and being interested in, the connectedness of elements a case study will imply a delimiting of the case that allows for this perspective to be applied. Then, comparing "variables" is not a preferred technique. Rather than delimiting the case by extracting variables for comparison, or intense study, extended case theory goes profoundly into each case. This is made by conceiving the case as being deeply embedded in its context. Then the case must be delimited in order to allow for studies of its connectedness and interaction with the surrounding environment. It must not be abstracted, but embedded. The goal is to find the *particular* external forces (macro) that shape the social situation (micro) under scrutiny by the researcher (Burawoy 1991: 274).

The macro level "offers" the context that is highlighted by Burawoy, but this is not to say that the micro level is a mirror of the macro level. In a book edited by Michael Burawoy and Katherine Verdery ("Uncertain Transition – Ethnographies of Change in the Postsocialist World") the editors point at the ways the micro level reorganises in former state socialist countries of Eastern Europe. Referring to the studies presented in the book they argue that what happens at the micro level is not – as often argued elsewhere – inherited legacy of state socialism, but rather a response to exigencies of the present (Burawoy and Verdery 1999:12). By applying extended case method Burawoy and his co-authors were able to argue that what looks like restorations of patterns familiar from state socialism are direct responses to the new market initiatives (Burawoy and Verdery 1999:2). This is a result of Burawoy's and his colleagues' use of context which consists in looking deeply into the specific contextual determinations of the social situation. Furthermore, it is a refreshing novelty to the studies of "post-socialism", and of great relevance to "path dependency" approaches. If Burawoy is right, what looks like path dependency is just a continuity of the "shell", whose contents have changed completely.

5.6 Relation between the researcher and the study object

As we saw, «empiricists» and «interpretivists» disagree as to how knowledge about the study object is achieved (*sui generis* versus generalised knowledge). The two schools also differ in their views on the relationship between the study object (case) and the researcher (and the reader of his works). In the empiricist school the study object does exist independently of what the investigator (and the reader)

thinks about it. For the interpretivists, who believe in «naturalistic generalisation», that does not hold true. Interpretivists have been accused of being weak on epistemology. They do not tell how they actually *know* things, «how the products of their interpretive endeavours are warranted», as one of their critics put it (Phillips, 1991:6).

Within the epistemology of “methodological unity of empirical science” the empathic abilities of the researcher is worth little. An exponent of this view is Carl G. Hempel, who claims that the personal experiences of the researcher are irrelevant. What counts is the ability to make use of, and discover, laws or “hypotheses of universal form” (Hempel, 1965: 231). Attempts by researchers within human and social sciences to imagine themselves in the place of the actors they study (“the method of empathic understanding”) can at best be used heuristically. The “methods of understanding”, according to Hempel, is little more than attempts at seducing the readers by means of persuasive metaphors. The meaning of historical events, like the development of a given institution, can only be understood through a causal analysis of the rise of the institution, and can not be subject to mere “evaluative opinion” (Hempel, 1965: 241).

Researchers making use of statistics often are regarded less «personal» in their approaches than case students. If not wrong, this may be considered a qualified truth. Case students are generally more personal, but that is mainly in the way they *report* their work. Often the aim of their activity is interpretation. Researchers basically making use of statistical methods present their findings in a less personal way, and rely much on tables and figures. But from where does the statistically oriented researcher know what «variables» to include?

In fact, before the reporting - both in the design and the field phase - both strands of method treat their object of study with a considerable personal touch. In fact, case students may be seen as less inclined to touch and manipulate the object under study than their statistically oriented colleagues. To large extent case students let the phenomena under study live their own lives, and “tell their own stories”, «only» scrutinised and analysed by them.

Statistically oriented researchers, on their hand, «cut up» their phenomenon under study, isolate the parts from each other, re-arrange them in relation to each other, choose to ignore the contextual factors, etc. This is perhaps most clearly expressed in the maxim of Przeworski and Teune that the case (nation) should be replaced with the name of variables, variables on which each case can be given a

comparable value (Goldthorpe, 1994:2). The statistically oriented researchers do all this because they believe it is possible to find knowledge about the phenomenon under study independently of what they themselves think and feel. Nevertheless one might object that doing all this, they make a lot of highly *personal* choices, but not always they make that clear for the reader of their reports. These personal choices are e.g. the way they «dismember» the phenomena under study; the way the «variables» are defined; what «variables» that are included.

It seems that the more a researcher believes the object of study is an objective given, the more prone he is to dismember it. And, the more a researcher accepts constructivist ideas, the more he tries to describe the object of study as one whole, encompassing as many aspects as possible. But how the object of study is “dismembered” into variables in the first place, and what aspects are included, rests to the researcher to decide.

The role of the individual in the research process is not merely a question of how well the researcher hides, or alternatively, exposes himself in the process of research. Rather it is a question of how we can understand phenomena. It is perhaps needless to say there is no consensus among case students on that issue.

Often case studies are accused of leaving too much to the interpretation of the researcher. The personal imprint from the researcher, it is claimed, makes case studies un-reliable. But prominent case students, like Robert K. Yin, come close to what was termed the statistically oriented researchers above. They try to formalise the relationship between the researchers as individuals and the object of study. They seek what Charles Taylor terms “brute data”, “building blocks by judgements which could be anchored in a certainty beyond subjective intuition” (Taylor, 1985:19).

Others clearly see the case study as an opportunity to exercise interpretative methods, in which the impressions and imagination of the researcher is the main source of knowledge. Stake is a prominent exponent of that view, stating that:

“The methods of qualitative case study are largely the methods of disciplining personal and particularised experience” (Stake, 1994: 245).

Charles Taylor’s concept of “experiential meaning” is “...for a subject, of something, in a field” (Taylor, 1985: 23). There is no such thing as a single, unrelated, meaningful element, Taylor claims. All

things have a meaning in relation to other things. Furthermore, the thing (action, situation, or demand) is distinguishable from its meaning. And, the meaning is always a meaning *for* someone. Taylor criticises mainstream political science - which is striving towards verification - for concentrating "...on features, which can supposedly be identified in abstraction from our understanding or not understanding experiential meaning (Taylor 1985: 28).

Sandra Harding (1987) presents an interesting contribution to the debate on the personal element in knowledge, i.e. the concept of experiential meaning. Herself a feminist, Harding would easily be expected to advocate female experiences to form the development of knowledge as an alternative to knowledge produced hitherto, that mainly has been made by male "knowers" or agents of knowledge. Instead she proposes that researchers, irrespective of their being female or male, start listening to "how women informants think about their lives and about men's lives" (Harding, 1987:2). This suggestion means that Harding would like to increase objectivity by focusing even more on the object of study (by listening to women experiences) than by increasing subjectivity (by bringing in the experiences of the female researcher). Harding wants to remove distortions by *including* new insights. "Only in this way can we hope to produce understandings and explanations which are free (at least, more free) of distortion from the unexamined beliefs and behaviours of social scientists themselves" (Harding, 1987:9).

5.7 The use of case study method in this thesis

This thesis is about the relations between new policy instruments and the context into which they are introduced. As a result of the research question being put, case study method has been chosen for the thesis.

Case study method enables a systematic study of case–context relations. There is no single case study method. Case study method is a wide approach and, as the overview above illustrates, is being used by researchers with varying epistemological bases. Therefore, in the following, this thesis' use of the method will be clarified.

Gaining knowledge from the case study

The thesis postulates that new environmental policy instruments will not work well without a well-thought out adjustment to the actual context in which they exist. Our assumption on transferability is that

the success of new environmental policy instruments is contingent upon their ability to be “in gear” with the surrounding institutional setting.

Then the questions are:

- *How* do the instruments interact with the surrounding institutions and actors?
- *Why* do instruments get rejected in some cases, *why* do they get in mesh with the surroundings in other cases?

“How” and “why” should be asked simultaneously. Asking “how” makes one look at the phenomenon at close range. This enables keeping a keen eye on the phenomenon’s complex interrelatedness with the context. Here lies the key to the answer not only to the “how” question, but to the “why” question as well. Looking at “how” makes it possible to tell “why” a new policy instrument is rejected in practice and what makes them get in mesh with the “surroundings”.

The combination of “how” and “why” is fully in line with what was said by some of the authors presented above. There is not necessarily a contradiction between interpretative, hermeneutic approaches on one side and the search for generalisation and causal links on the other. The case is embedded in, and interacts with its context. Understanding a case in its context, seeing the configuration of elements may be a precondition for finding general patterns and causes. In order to grasp social phenomena empirically their “real-life contexts” must be taken systematically into consideration. Case study method may be an efficient means of bringing to the fore the actual circumstances, or conditions, under which the cause leads to the effect. Below, the main messages of the case study authors presented in this chapter will be repeated with the aim of linking it to the study of NEPIs in Russia and Latvia.

Reliability and validity

The ideal situation in which researcher number one documents his procedures in such a way that a researcher number two could repeat it with exactly the same result would enable perfect *reliability*. In case-studies a wide variety of data are made use of. For instance in this thesis on the use of NEPIs official documents, newspaper articles, scientific publications, formal interviews, informal conversations, discussions with peers and analysis of the interlocutors’ use of words and concepts are being made use of. In the presentation of the cases it is taken special care to make references to the talks and documents

conclusions are based on, and sequences of thought are spelled out. The accuracy of the observations made is strengthened by the fact that major interlocutors are interviewed, or talked with, several times over the period of time covered by the study. Nothing has been lost in translation since the working language is Russian (which also the Latvian interlocutors master with perfection).

The data's *validity* is a question of their relevance for the problem studied. The data in this thesis are drawn from the activities of the main environmental authorities and the main polluters while making use of NEPIs. Economic environmental policy instruments (fines, fees, ecological funds), voluntary agreements on a local level and setting up local environmental programmes are being analysed. These empirical data are in accordance with the theoretical notion of "main actor's use of NEPIs".

Objectives behind case studies

As shown in sub-chapters above, although sharing an interest in the case–context relationship the case study authors differ with regard to their objectives. The table below sums up the differences.

Table 5.1 *The objectives behind case studies*

	Use of context to:	Objective
<i>Yin</i>	– gain in-depth, real-life understanding to make case studies that are replicated (like experiments)	Analytical generalisation
<i>Stake</i>	– describe the case in a way that activates the readers' own experiences	Naturalistic generalisation
<i>Ragin</i>	– bring configurations to the fore in order to depict actually existing, historically concrete causes	Causal combinations
<i>Glaser and Strauss</i>	– generating theory from data by "airing" newly developed theory in order to check whether the theory about the studied phenomenon "survives" abstract from time and place	Generic explanation
<i>Burawoy</i>	– seek out historically specific causality	Genetic explanation

Robert K. Yin aims at generalising, not statistically, but analytically. Analytical generalisation is achieved through replication and pattern-matching, which Yin likens to experimentation. Pattern-matching implies a comparison of an empirically based pattern with one (or more) predicted one(s) (Yin, 1994:106). The selection of cases to study should be made as a laboratory investigator selects the topic of a new experiment (Yin 1994:31). This is not only an alternative to statistical generalisation, but also to the most similar and most different case strategies, which are often being applied in comparative research design.

Yin's approach is similar to the one applied in this thesis. Each case study is presented with the view of observing how theoretically based expectations fare. We expect a misfit between instrument and surrounding. Our expectations are summed up as "assumptions" presented in the initial parts of the case study chapters 7 and 8 below. By observing one case we refine our expectations, and carry out a second case study in which once again the empirical pattern is checked against the theoretical pattern. This is different from the classical comparative technique consisting in most different and most similar designs, where cases are picked according to similarity or dissimilarity in either background factors or outcome. In this thesis on NEPIs in Russia and Latvia the differences between the two countries are made use of to contrast the two settings analytically, thereby throwing light on the relationship between policy instrument and setting. But the study is not primarily a comparative one.

Robert E. Stake, the second author in the table above, is strictly hermeneutic and looking for the valued particularity of one case at the time. Nevertheless, he seeks generalisation. Stake's generalisation, however, is a generalisation that is personal and individual. His "naturalistic generalisation" is of little use in this study, but may be of use in the science of education (and in the techniques of disseminating research results). It is referred to here in order to illustrate the multitude of case study approaches.

Charles Ragin's concept of causal combinations inspires this thesis by pointing at the possibility that different contexts allow for the same outcome to take place (Ragin 1987: vii). The expected outcome of putting a policy instrument to work is dependent upon causes that may "behave" differently in different contexts because they are "often both multiple and conjunctural" (Ragin 1987:27).

Ragin is less prone to believe in case studies' ability to generate generalisation, though, and advocates "fuzzy-sets" in order to be able

to cope with a larger amount of cases than usual in most case study strategies. The following case studies of Russian and Latvian single-enterprise towns are not in an amount that requires a fuzzy-set approach. Ragin will be used for his awareness of the need to bring configurations to the fore in order to depict actually existing, historically concrete causes. This opens up for explaining why a policy instrument works in one country, whereas it does not work in another.

Just like Ragin's causal combinations, Michael Burawoy's historically specific causality" (Burawoy 1991:281) points at the specificities of the situation in which causes are set in work. Burawoy is more prone to focus on the specificity of each case than the class of phenomena, though. This he terms genetic explanation. He explains the phenomenon through its origins, how it originated. For Burawoy the case is important for what it tells about the world in which it is embedded. He looks for the particularities of the macro that shapes the micro.

The purpose of this thesis is different. It is not primarily to contribute to the understanding of the transitional societies and polities, but to the understanding of the phenomenon under scrutiny (the NEPIs). But just like it is for Burawoy, for us "the world in which the case is embedded" is of interest for what it *does to* the case.

Drawing the line between case and context

There is some confusion, or lack of cogency, in the literature on and practice of case studies as to what is meant by "case" and what is meant by "context". The case study authors presented above define their cases differently, as the table will show.

Table 5.2 *Case–context relations in the case study literature*

	Relation case/context
Yin	Boundaries between phenomenon and context not clearly evident
Stake	Boundaries should be made sharp
Ragin	Case consists of parts that must be understood in their internal and external contexts
Glaser and Strauss	Phenomenon constant, context/setting different
Burawoy	The specific historic context shapes the phenomenon we study

For the purpose of this study an alternative way to delimit case and context has proved to be useful. That delimitation distinguishes between phenomenon, site, case, and context, as outlined in the sub-chapter below.

Phenomenon, site, case, and context

Why is it a good idea to operate with a more fine-meshed set of categories to describe case and context? Why should we distinguish between phenomenon, site, case, and context?

At times case students may tell that their cases are, say, Catalonia and Karelia. Sometimes that may be right, but only if they really study these two European regions as entities. More likely, however, they study specific *phenomena* that unfold in these two provinces. This may be regional policies for keeping more of the tax incomes at the regional level, attempts at playing a role at the international arena, or linguistic self-assertion on behalf of Catalan and Karelian or Finnish vis-à-vis Spanish and Russian respectively. Then it would be more accurate to say that Catalonia and Karelia constitute the “sites” where the “context matters”, which makes it possible to make in-depth studies of the “phenomenon” of interest.

What would then be the “case”? The answer to this question would be that the cases are, for instance, the policies (“phenomena”) of linguistic self-assertion *as they unfold in the two regions*. In other words, phenomenon in its site = the case.

By extending the study by including one more case, the researcher necessarily has to change the site (for instance by including Québec), but whether the definition of the phenomenon must be changed depends on “how it survives” the meeting with the new site. How the understanding of the phenomenon must be revised after having changed site is the essence of theoretical sampling.

What is then the *context*? The context is the larger cultural, social, economic and social surrounding. The context as used here, is the macro context, whereas the site is the micro context. This analytical distinction may be convenient for studies at local level.

Empirically phenomenon, site and context are not strictly apart. The site is formed by the wider context, and to some extent activities taking place in the site may influence on the context. The same holds true by the phenomenon under study. Most often the distinction between the phenomenon and the context is blurred because the phenomenon is there very often as a result of the context.

For instance, NEPIs are introduced under some circumstances that led to a lot of other decisions, occurrences and developments, exactly the decisions, occurrences and developments that constitute the context. NEPIs may be a novelty in the context, but they are not there *against* the context.

Likewise, the phenomenon under study (i.e. NEPIs) is shaped by the site (and vice versa). Local specificities influence on the ways the phenomenon functions and how it is shaped.

The thesis will follow up the distinction outlined here between phenomenon, site, and context because they enhance the analytical precision while dealing with the interconnectedness of elements that constitute a case study. The larger context (social, economic and cultural surroundings summed up as “country in transition”) is “made itself felt” in the site (single-enterprise town). The phenomenon (the NEPIs) *in the site* constitutes the *case* (the introduction and working of NEPIs).

All in all the distinction is useful because it makes it possible to keep the scrutinised phenomenon, immediate surroundings (site) and macro context apart analytically. At the same time, as compared to just operating with “case” and “context”, it enhances the possibilities of analysing intertwining and interaction, in short the interconnectedness of elements.

6 The development of environmental protection and its instruments in Russia and Latvia

The aim of this chapter is to identify how elements from the past were rejected, alternatively built on in the two countries during and after the break-up of the Soviet Union, in particular the period covered by this thesis (1997–2001).

As argued above, the study of policy transfer must be based (among others) on insight into the setting (political and administrative nexus) into which the specific policy or instrument is introduced. Doing that, looking into the setting's past is necessary since institutionalised frameworks can be expected to continue living even when a break with the past has brought with it new laws and new organisational set-ups.

Whereas chapter 6 analysed the development of the general political and administrative nexuses in Russia and Latvia in a theoretical perspective, this chapter will look particularly and empirically into the “environmental section” of the setting. This is because the transposed environmental policy instruments have had to relate to already existing instruments, or in case they have been removed, their “ghosts”. Likewise new instruments have to be used by agencies, either “old” or newly established. Furthermore, the characteristics of environmentalism and environmental concern in the borrowing setting have a bearing on how the operators of the new instruments will be able to make use of them.

The analysis includes the ideological frameworks within which environmental concern has been voiced, the linkages with other

political or policy issues, the alliances environmentally concerned actors have entered into, and the types of instruments chosen.

Underlying questions will be:

1. To what extent did instruments/NEPIs develop locally/nationally before the massive influx from abroad, or were they mainly results of developments prior to the Soviet collapse? Was the “borrowing setting” actually borrowing?
2. To what degree did the development of environmental protection in the two countries lead towards “ecological modernisation”, elements of it, or equivalents to it?

In what ways did the environmental sector cope with the characteristics of state socialism, identified above as a) low differentiation, b) difficulties in establishing non-hierarchical patterns of interaction and c) feeble epistemic communities?

More specific questions will be asked about the new environmental policies:

1. What made the policy desirable (what problem was it a response to)?
2. What actors supported it and were ready to underpin it as soon as it was introduced?
3. What already existing institutional arrangements did the new policy lean against/ what institutional arrangements did it link up to?

The role of international agreements and “processes” in the field of environmental protection will be referred to in brief, although this is no major focus. Agreements and regimes refer to the process of transposition *between* the origin and the destination, which is not the main focus of this thesis (cfr chapter 2 on policy transposition).

6.1 Approaches within environmental protection

Concern for the environment has taken many forms, and new types of environmentalism have developed continuously in the industrialised world. Ecological modernisation, as presented in chapter 3, was “state of the art” in the period covered by this thesis. In everyday practice,

however, several approaches to environmental protection co-exist in time and space. In order to structure the analysis of Russian and Latvian environmental protection reference will be made to the types of environmentalism identified in the literature.

The classification made by the Norwegian political scientist, Alf-Inge Jansen (1989: 51–101) will serve as a point of departure:

- classical environmental protection
- cultural protection
- public health
- growth with protection
- ecological ideologies

Jansen dates “classical protection” to the beginning of the 20th century. Within this line of thought, man is supreme, but needs Nature in order to grow economically, culturally and spiritually. The main tool here becomes the protection of “natural monuments”.

The concept of “cultural protection” is very close to “environmental protection”, and dates from the same period. It focuses on the man-made environment (cultural landscapes, urban environment), and on registering and preserving cultural monuments.

According to Jansen (1989: 87) “public health” may be perceived as a parallel policy field to that of environmental protection, but also as an “ideology” within it. Here nature is potentially threatening and the basic approach to it is to curb it.

“Growth with protection” focuses on industrial and municipal pollution and waste. Its perspectives do not reach beyond the limits of the “system”. Modern technology for cleaner production as well as economic instruments NEPIs are used within this framework.

“Ecological ideologies” focus neither on man, the man-made nor on nature, but on the Planet Earth, which is conceived as a closed system (likened to a “spaceship”). Man is not placed above nature, but will have to learn how to live as a part of it. Deeply ecologically minded authors like e.g. Robin Eckersley (1992) argue that the types of environmentalism can be placed on a scale ranging from “anthropocentrism” to “eco-centrism”. Others, like Luc Ferry (1992) have warned against the potential side-effects of juxtaposing the animal and man, the nature and the man-made.

In subsequent sub-chapters it will be argued that the types of environmental ideologies presented by Jansen (1989), although based on the Norwegian case, existed in the Soviet Union as well. In that context they took on a somewhat different meaning and importance, which will be analysed. The purpose of that analysis is to identify the ideologies by which contemporary environmental protection is surrounded and marked.

Ecological modernisation entails a combination between protection *for* development (“growth with protection”) and protection *from* development (“ecological ideologies”). Ecological modernisation is a synthesis of the two types of environmentalism. The structural character of the environmental problems (pointed at by ecological ideologies) was acknowledged on the part of the authorities. In return, the environmentalists left earlier “fundamentalism” behind and started to operate within the frameworks of the existing political, economic and social institutions.

To what extent did the development of environmentalism in Russia and Latvia lead towards ecological modernisation?

6.2 The development of the Soviet system of environmental protection

In this sub-chapter the development of Soviet environmental protection will be presented in the light of the categories referred to above.

The development of the environmental issue in the Soviet Union went through several phases. At first conservationism (nature reserves of various types) ruled the ground alone only backed by urban public health and sanitation. With the industrialisation came the need to control pollution (pollution control legislation in the late 1940s). In the late 1950 environmental protection was institutionalised, but then first of all as a measure to counteract “factionalism” in the industrial bureaucracy.

The controversy over the planned building of a pulp and paper mill at the lake Baikal brought the environmental issue to a broader audience and it linked up with other currents in society to become quite forceful. Throughout the 1970’s and 80’s the idea of a separate environmental agency to replace the multifaceted set-up of ministries and committees with sector-wise responsibilities in the field struck roots.

In other words, in large the development of the environmental issue in the Soviet Union resembled very much that of other highly industrialised countries. For instance, the environmental issue was given priority at a high level in the Soviet Union, just like elsewhere in the industrialised world, in the early 1970s. The Supreme Soviet session of December 1972 passed an important Joint Resolution with the Central Committee of the CPSU in which nature protection and improved nature use were established as major concern of the Union⁷. In the Russian literature the change since the early 1970s is described as one going from a “sanitary” (“public health” approach to one “ecological” (Brinchuk 2002:80). It has also been depicted as a shift from conservationism to environmental protection (Ziegler 1987: 53).

6.2.1 Nature and culture protection in the Soviet Union

The first Act on Nature Protection in Russia was elaborated in 1915-16, but the process was temporarily halted due to the revolution of 1917. Magnificent buildings, like the Ermitage, were protected. As early as 1919 a decree from the Council of People’s Commissars of the Russian Soviet Republic was passed on sanitary protection of dwelling-houses (Brinchuk 2002:79). In other words, the ideologies of classical nature protection, cultural protection and public health manifested themselves in the young Soviet state.

The Council of People’s Commissars (the Government) issued a decree signed by Vladimir I. Lenin as early as October 1921, “On the Protection of Monuments of Nature, Gardens and Parks”. As a result of this decree a small department within the Ministry of Education was set up to serve as an agency for protection issues. Several protected areas were established during the first three decades of the Soviet Union (Pryde: 1991:138). Also laws and decrees on land, on forests, minerals, on fisheries, and on hunting, on the protection of natural monuments, gardens and parks were adopted.

Despite the establishment of several nature reserves, where the landscape was preserved for its own sake, most of the environmental activities in the first three decades of the Soviet Union were directed at conserving nature resources for the sake of production.

The priority given to production and the neglect of its harmful side-effects on people’s health and the nature was not confined to the

⁷. Passed 29 December 1972 and registered as Joint Resolution no. 2/1973.

Soviet Union at the time, but was prevalent all over the industrial world. The same holds true for technocracy.

Nevertheless, the conservationist issue lived on. The first fully-fledged national park in the Soviet Union, however, was not established until 1971: this was Lahemaa in Estonia, followed by Gauja in Latvia two years later. Between 1975 and 1988 the number of protected areas in the Soviet Union grew, and the amount of land set aside for such purposes trebled (Feshbach & Friendly, 1992:41). The 26th Congress of the Communist Party of the Soviet Union (1981) called for a “network of protected areas and national parks scientifically based on the studies of natural systems and objects with the purpose of creating the recommendations on rational use of natural resources.” Rational use of natural resources has been a key expression within Soviet and post-Soviet “protection for growth”. Economic and environmental research institutions have departments of national nature use.

6.2.2 “Public health” and the 1949 Air Pollution Resolution

Protection of nature and culture was one “type” of environmental protection that was recognised in the Soviet state. It was accompanied with “public health and sanitation”, which had its deep roots in pre-revolution urban regulation. Concerns for human health were behind anti-pollution legislation. As early as 1949 the USSR Council of Ministers introduced anti-pollution legislation through the resolution «On Measures in the Struggle Against Pollution of the Atmosphere and on Improving the Sanitary-Hygienic Conditions of Populated Areas». In comparison, the USA got its first clean air legislation in 1970.

The 1949 resolution basically restricted the building and re-building of industries that let out waste gases. It prohibited the establishment of construction projects, reconstructions, or renewal of industrial objects, if these objects did not provide for installations that caught ash and dust.

The administrative responsibility to follow up the revolution on air pollution was dispersed on several agencies, but new ones were not established for the purpose. The Ministry of Higher Education was made responsible for the education of specialists to do gas and dust trapping (end-of-pipe technologies were certainly not only confined to the Soviet Union at the time). Other ministries were to work on purification methods in their institutes and laboratories. The state

sanitary and epidemiological service – the main agency for “public health” – was vested with the task of monitoring harmful emissions.

The long-term effect of the resolution was that professionals all over the Union came to identify with the tasks of researching and monitoring effects of air pollution and finding solutions to remedy it. Interestingly, later on the role assigned to the sanitary service was criticised by natural scientists and some environmentalists on the grounds that medical doctors allegedly focused too much on anthropogenic impact and too little on the surrounding nature. This was the seed of two groups that can be likened to advocacy coalitions, one based on concern for the human being, the other for the nature, or “public health” against “nature protection”.

6.2.3 Conservationism

Union Republic Laws on Nature Protection 1957-1963

In the 1950s it came clear that a partial decentralisation of tasks pertaining to nature resource use and environmental protection was needed. Between 1957 (Estonia) and 1963 all the fifteen republics in the Union passed legislation on nature protection (the Russian Soviet Federative Socialist Republic in 1963, the Latvian Socialist Soviet Republic in 1959). Some authors hold this to be the wave of legislation that marked the full introduction of environmental protection as a policy field in the Soviet Union (Sobol’ 1999).

The nature protection laws merged the two issues of *nature protection* with *nature resource use*, which has been the usual combination since. The laws were clearly conservationist in the sense that they secured the protection of natural resources for future use. The wider perspectives of environmental protection were not included in the law (issues like protecting natural landscapes, keeping the air clean, protecting human health were provided for in other legislation).

According to Charles E. Ziegler (1987:50) the wave of nature protection legislation around 1960 was not the result of pro-environmental offensive underpinned by public concern for the issue. That was to come a decade later. Rather the legislative initiative should be seen in the light of the centrally led reform strategy against “departmentalism”, a strategy in which strengthening nature protection was but a minor element. The strict segmentation of the state’s administrative apparatus into industrial branches had developed into a hindrance for the implementation of central policies. Environmental laws would necessarily strengthen supra-branch

thinking. Similarly, but much more significantly, in 1957 the *sovnarkhozy* (economic councils) were established to co-ordinate economic activity at regional level across the hitherto watertight bulkheads resulting from branch-wise organisation of the economy. Furthermore, the first secretary of the Communist Party of the Soviet Union, Nikita S. Khrushchëv, appealed to popular participation to weaken the intermediate branch structures.

At the time all policy sectors that cut across the industrial branches were welcome. Nevertheless, in practice environmental protection ended up very much as a responsibility for each industrial sector to address on its own. The same holds true for the use of new instruments in environmental protection.

The new republican laws (1957–1963) introduced state surveillance on the nature resource users and polluters. For instance, in the case of the Russian republic a follow-up to the law a resolution was made in 1963.⁸ The resolution committed ministries and departments to organise the technical inspectorate of the work on purifying installations. The law placed the responsibility of violation on rules of environmental protection done by enterprises, organisations, collective farms, state farms and citizens on the executive authorities, ministries, departments and executive committees of the local soviets under which the enterprises operated. In other words, responsibility was not on the enterprise itself as an independent actor, but on local government and branch ministries.

Legislation of the 1970s

In the late 1960s environmental concern was brought into the public life, among others in form of the Lake Baikal controversy. The shift was followed up by new legislation. Formally each Union Republic passed its own laws, but they all followed a common Soviet template. The Russian Socialist Federative Soviet Republic passed its Land Code in 1970, its Water Code in 1972, its Mineral Code in 1976, and its Forest Code in 1978. A Law on Air Pollution and a Law on the Protection and Use of the Fauna were both adopted in 1982. Similar legislation was passed in Latvia.

The new laws focused on the *use* of the natural resource in question, not on the *pollution* of them. Mikhail M. Brinchuk (2002: 80) explains the lack of provisions on pollution in most of the laws by referring to the scarce knowledge on pollution at the time of elaborating and

⁸. Resolution of the Council of Ministers 18 September 1965 "About the implementation of the RSFSR law of 27th October 1963".

passing the laws. There was one exception to the pattern. The USSR Law on the Protection of the Atmospheric Air from 1980 regulated the physical and biological impacts on nature. There had existed several norms and regulations, but they lacked co-ordination until the 1980 law made a unified system. The law established norms on the observance of the demands on protection of the air at the introduction of new technological systems.

The fact that nature use intensified in the 1960's made nature resource use regulation a major priority. The fact that most laws were somewhat vague on pollution was counteracted by the fact that most of the regulation at the time came not as laws, but as lower level legal regulations. These were resolutions (postanovleniia) from the government (of the Union and the Russian republic) and internal branch regulations (vedomstvennye pravila i instruktsii).

6.3 The development of Soviet environmentalism

So far, this chapter has addressed the development of a Soviet system for environmental protection. What undercurrents were there to underpin the environmental sector?

The seminal study – “Environmental Policy in the USSR” – by Charles Ziegler (1987) is based on the observation that the policy process had undergone a pluralisation during the decades since Stalin's death. During the reign of Leonid Brezhnev (1964–1982) and after the Party devolved responsibilities onto various functional groupings in the system. The regime bases itself on specialists. Specialists are allowed to debate, but the Party is the final, supreme arbiter. Ziegler (1987: 58) applies a “state corporatist” model in which “publicized discussions of topics are either explicitly initiated or encouraged by government elites”. Ziegler's approach allows for the study of groups in the processes of Soviet decision-making. This way advocacy coalitions and epistemic communities can be traced and analysed.

6.3.1 Pro-environmental actors

As noticed above, the legislation on nature and culture protection as well as pollution control assigned tasks to specific agencies. The hydrometeorological service and the sanitary-epidemiological service both were major actors equipped with their own networks of educational and research institutions. As for nature protection stricto

sensu a Commission on the Protection of Nature had been established within the USSR Academy of Sciences in 1955 and in 1959 nature conservation was acknowledged as a problem for geographers (Ziegler, 1987:49). Later it was assigned to the geographers of the Academy of Sciences to propose sites and management systems for the parks. Ethnographers and cultural workers formed the backbone of the endeavours to conserve selected pieces of man-made environment.

Voluntary associations supported the environmental cause. The biggest environmental organisation, the All-Russian Society for the Protection of Nature had 33 million members by 1980 (Ziegler 1987: 70). It was founded in 1966. Likewise, the All-Russian Society for the Preservation of Monuments (VOOPIK) stepped up their activity in the late 1980s (Shlapentokh, 1990: 278).

Writers, artists and scientists played an important role in specific environmental conflicts, notably the Lake Baikal issue (see chapter 6.3.3).

6.3.2 Environmental mass media

There were open fora in which the environmental issue could be discussed, even in the young Soviet state. The monthly journal 'Priroda' (Nature) stemming from 1912 continued to come out after the Revolution. Other journals covering environmental protection was 'Ėkologiiia' from the 1970s and 'Geografiiia i prirodnye resursy' (Geography and Natural Resources). A journal called 'Okhrana Prirody' (Preservation of Nature) existed until 1930 when it was followed up by 'Priroda i Sotsialisticheskoe Khoziaistvo' (Nature and Socialist Economy) that propagated the Party line of deriding the so-called 'old theory of protecting the nature for nature's own sake'. Interestingly, the reprehensible view must have had its supporters because Okhrana Prirody found it worth attacking the "certain professors who still have support in our society" in protecting the nature for its own sake (Ziegler 1987: 63-4; Feshbach & Friendly 1992:42).

6.3.3 The controversy over Lake Baikal: a catalyst

In 1963-5 the lack of civic engagement that had accompanied the wave of nature protection legislation in the Soviet republics around 1960 was broken. Interestingly the debate was sparked by the (in a Soviet context) deeply conservative journal *Oktiabr*'. This journal launched a campaign in 1963 to protect Lake Baikal from the

pollution expected to result from the planned construction of two pulp and paper mills at the shores of Lake Baikal (Kagarlitsky, 1989:219).

According to Charles E. Ziegler (1987: 53) the debate represented a watershed. The perspective was moved from conservationism to environmental protection. A mixture of arguments were put forward, from the “spiritual” appeal by Mikhail Sholokov to the CPSU 23rd Congress to preserve “sacred Baikal” to strictly scientific arguments put forward by members of the Academy of Science. New to the debate, however, was the strong and explicit emphasis on preserving nature for other reasons than purely economic ones, an idea that hitherto only manifested itself in the protection of some nature reserves.

In the Baikal controversy several actors were discernible. The cultural elite, represented by prominent authors, was outspoken on the issue. Also in later controversies the writers played an important role. Scholars of the natural sciences made up another pro-environmental group in the process just like the sanitary and epidemiological doctors did. For instance, the chief sanitary physician of the USSR protested against the plans. Heading one of the agencies vested with environmental control and monitoring responsibilities, he was a heavy actor.

Due to the segmented and centralised Soviet system the developer of the environmentally harmful project was a branch ministry, in this case the Ministry of Timber, Paper and Woodworking. In order to counter this actor, the environmental debaters argued by referring to another industrial sector, that of fisheries. Baikal fisheries would suffer from the pollution caused by pulp and paper production, it was held. Another argument, which had a stronger effect because it was in line with official politics, was that of fighting “departmentalism”. In other words, the environmental cause was articulated within the frameworks of the system and linked up with on-going reforms. This observation is relevant for the question of non-hierarchical communication as well as that of an advocacy coalition.

6.3.4 Environmentalists linking up to other debates

The development of the environmental sector should be analysed among others in the light of what issues the environmental cause linked up to. However, not only the authorities made use of the environmental issue to promote a wider cause. Also environmentalist groups played a role.

Any description and analysis of Soviet environmental debate must have in mind the political surroundings. The idiosyncrasies of Soviet state socialism provided the setting for the articulation of environmental concern. The environmental argument had to be wrapped in a rhetoric outfit that made it sustainable within a Soviet context. For alternative views to be taken into consideration, they had to be voiced in an extremely “loyal” way. Often this was achieved by referring to supreme goals or linking up with ongoing reform processes (this will be treated in a sub-chapter below). Above, the wave of environmental legislation in the late 1950’s and early 1960’s was seen in the light of the endeavour to curb departamentalism.

Slavophiles versus Westernisers in Soviet environmentalism

On the other hand, the Soviet regime was also challenged by a system-critical environmentalism that perceived environmental problems as being inherently linked to the “system”. Parts of this opposition in Russia drew the lines back to the Slavophiles, and concentrated on cultural conservatism with the aim of preserving Russian village and ecclesiastical architecture. Similar occurrences were present in the Latvian context.

The Soviet Union had a special ideological underpinning that differed from other industrialising countries. Russian Marxism held rapid and ruthless industrialisation to be a core element in the realisation of History. Russian Marxism had some of its roots in the discussion between Slavophiles and Westernisers (*zapadniki*). As pointed out by Charles E. Ziegler (1987) the two strands had divergent views on man and nature. The Slavophiles built on a naturalist attachment to land and drew the lines back to pre-Christian Slav animism. The peasants were the heroes in this ideology that could be boiled down to a glorification of *stasis*. The *zapadniki*, on the other hand rejected the eco-centric model for a techno-centric one. Here, the heroes were industrial workers, engineers and scientists. Technological, not spiritual development was the main causal agent of social and political development.

In the Soviet Union the environmental issue manifested itself in two major ways among scholars, scientists and cultural workers. One current of environmentalism was technocratic, the other romantic. The cleavage was similar to that existing one hundred years earlier which had given rise to Slavophiles and Westernisers.

Eager to modernise the technocratic current criticised the “backward” aspects of Soviet realities. The romantic current criticised some “modern” aspects of Soviet society with the aim of preserving what

was held to be national (Russian) specificities. The neo-Slavophiles cultivated the “idea of a possible return to the past” (Kagarlitsky, 1989:224).

Similarly, in Latvia environmentalism was split between a technocratic-liberal and a romantic-nationalist current, although they were co-operating well during the campaign to regain Latvian independence.

Technocratic environmentalism

The technocratic and modernising argument for taking environmental concern emphasised issues like rational use of natural resources among others by developing and introducing more modern technologies. Keywords were rational nature use (*ratsional’noe prirodopol’zovanie*) and efficiency (*effektivnost’*). Ziegler points at the main claims put forward by Soviet spokesmen of environmental protection (1987:43). They all bear witness to the aim of perfecting the existing socio-economic system rather than of questioning it:

- A centralised supra-ministerial agency to counteract the production ministries.
- Greater role for environmental specialists and officials in regulating enterprises and municipalities (less politics more experts)
- Greater role for technical solutions (as opposed to political ones).
Belief in technology
- All production plans must include thorough evaluations on impacts of economic activities on the environment

The technological current thrived in the Brezhnev era. The latter part of Brezhnev’s rule of the Soviet Union has been termed the Period of Stagnation. However, this was also a period during which scientific activities quietly reasserted themselves on their own terms. In addition, voluntary organisations (*dobrovol’nye obshchestva*) were able to operate, although within narrow limits.

Romantic environmentalism

In the 1970s and 80s segments of Russian society began to react to drab Soviet modernity by a re-evaluation of older traditional values. This concern was often mixed with ecological concern. This was the romanticist type of Soviet environmentalism.

Both efforts to raise “ecological” – i.e. environmental – issues and the devotion to Russian cultural heritage were supported by the so-called neo-Slavophiles within the Russian intelligentsia, a semi-oppositional movement tacitly tolerated by the authorities. The combination of cultural tradition and ecology was reflected on the scientific level by the attempts at developing a theory of “cultural ecology” and in literature by the village prose (*derevenskaya proza*). According to Boris Kagarlitsky the village prose authors were “the most peaceable group among the nationalists” (Kagarlitsky, 1989:218). Valentin Rasputin’s famous novel *Farewell to Matëra* (1976) was perhaps the first intra-system piece of art to defy the Soviet dogma of the beneficial role of technological progress. Extolling the virtues of the past and the countryside, this current has been termed the “back-to the soil” movement.

The concept of “cultural ecology” requires some explanation, as the concept is not widely known outside the Russian context in which it was coined. “Cultural ecology” is attributed to the academician Dmitrii Likhachëv, who first elaborated on it in a publication by VOPIK (Likhachëv, 1980:10). Boris Kagarlitsky (1989:218) described Likhachëv as “moderate and liberal-minded”.

According to Likhachëv’s theory, there is a close interrelationship between cultural and natural environment, in the sense that the culture of a population, or “*ethnos*” as Likhachëv preferred to term it, greatly depends on the landscape where the population lives. This line of thought has enjoyed strong support in important sectors of Russian political and cultural thinking. Cultural ecology is based on the idea that the man-made environment forms a part of the ecological complex. Cultural ecology takes already well-known concepts and places them within a broader ecological framework. The theory of cultural ecology is explained with the help of concepts like “architectural and colour environment” (*arkhitekturnaia i tsvetovaia sreda*), “light and sound environment” (street lights and church bell music), “information environment” (language and semiotic systems, folklore, literature, mass media). Even religious phenomena are included – as “spiritual environment” (Davydov, 1997:163). “Cultural ecology” formed a conceptual framework for Soviet Russian preservationists, who were eager to present their issue in a scientific way. Their concern was certainly not only with the adverse effects of state socialist modernisation on nature, but also the system’s capacity to efface Russian traditions.

National undercurrents of Latvian environmentalism

Also in Latvia there were currents that advocated a reassessment of national, rural culture. Although writers and artists were supposed to hail Soviet culture, the national culture of the Union republics was also supposed to find expression. In 1978 the status of “built-up cultural monument” was introduced in Latvia to keep local traditions of building alive. Specialists protested against attempts at moving houses to the republic’s open-air museum. Among the most prominent proponents of a Latvian line were poets like A. Salna, enthusiasts of countryside culture like S. Cimnermanis, and not least of cultural landscapes, like I. Janele. All contributed to a history calendar on folk architecture edited by S. Cimnermanis (1990).⁹

Although generally treating Russian culture as the Latvians’ “constituting other”, the environmentalists-nationalists in Latvia emulated the Russian neo-Slavophiles in finding the roots of their own nationality’s unique closeness to nature in the distant past. Katrina Z. S. Schwartz (1999) has noted references to the Latvians’ pagan “heritage of sacred springs, groves, caves and stones” in as modern, and liberal documents as the National Environmental Policy Plan of 1995.

In the Latvian Soviet republic environmentalism was very much a system-critical issue. Most of it was voiced as a national issue against what was viewed as the Soviet destruction of Latvia, although an officially sanctioned environmental association – the Latvian Society for Conservation of Nature and Cultural Heritage – played a considerable role (Vesere and Bruneniēks 1999: 194). The rallying points of Latvian environmentalism *and* “national re-awaking” were the protests against the plans of building a metro system in Riga and a hydro-electrical dam in the river Daugava. This means that even projects that might have gone down as being beneficial to the environment (reducing car traffic and dependence upon nuclear energy) were fought on environmental grounds. They were not accepted as benign projects of development, but as attacks on the Latvian nation.¹⁰

⁹ Thanks to Raimonds Ernšteinis (University of Latvia) for this piece of information.

¹⁰ This is very well illustrated by Dainis Ivans (1996: 47-104), who was one of the leading personalities in the Latvian environmental and national mobilisation in the 1980s and early 1990s.

Summing up

There are clear parallels between the Western ideology of “growth with protection” and the “technocratic” attempts at putting environmental protection on the agenda in the Soviet Union. Rational use of nature resources was a common key-word. There was, however, a bigger East-West difference between the rivalling “ecological ideologies” although they shared some anti-modern, anti-urban ideas.

The anti-modern “Slavophiles” of Russia were co-opted as patriots and allies of the conservative forces within the Communist Party, and could hardly be perceived as bearers of an uncompromising ecological ideology. Proponents of this ideology became intra-system, and got into communication with the authorities. In Latvia, culturally conservative nationalists also drew on environmental issues, but in the small, illegally annexed republic, this kind of ideology was subversive.

The technocratic-environmental current’s intra-systemic argumentation opens up for dialogue with the authorities (like in ecological modernisation) and it enables the development of advocacy coalitions with participants from various sectors and levels of government. The concept of a “scientific-technical revolution” (STR) provided a framework in which communication and coalition-building could unfold.

6.3.5 The “scientific-technical revolution” and the environmental issue

State socialism promised to subdue nature for the sake of modernisation, and it emphasised the role of science in the development of socialism toward communism, a process postulated to be of a scientific, rule-like character. The role of scientists was to describe and further this process. Maksim Gorkii put it like this:

“In the Union of soviets, organised scientific reason enjoys from now on an unlimited freedom in its struggle against the elements of nature. In conquering these forces, in forcing them to work in a docile way for the grand universal cause of creating a society without classes of equal men, reason, with more and more audacity, success and evidence, shows its power as a creator and organiser of a “second nature”, that is of a culture built on the ground, on the forces and treasures of

the first nature, which is old, disorganised, and even hostile to the interests of the toiling humanity” (cited after Lemechev 1991:30).

In the 1960’s the belief in science was spurred by the Soviet technological achievements in space. The leadership in the Soviet Union even introduced a special amendment in Soviet Marxism. Hereafter science was to be seen as an important part of the forces of production in society (Shlapentokh, 1990:9). This was the theory of the “scientific-technological revolution”. The “mass intellectuals” – operationally defined as those with graduate or post-graduate degrees – constituted the backbone of this Soviet revolution. The group of scientists and scholars, most of them on a high professional level, amounted to some 500,000 individuals by the mid-1980s (Shlapentokh, 1990: x).

The “scientific-technical revolution” (STR) was an officially initiated conceptualisation of the increased importance of science both in the day-to-day running of the country and in its legitimation. Within a Marxist worldview the STR was quite a big step. With the STR science is transformed into a force of production. The strongly oppositional and Marxist sociologist Boris Kagarlitsky wrote that the STR implied that “the many-millioned intelligentsia of today has become an independent social stratum, capable not only of formulating its aims, but often of achieving them” (Kagarlitsky, 1989:111).

STR created new environmental problems since new polluting compounds were discharged due to technological innovation. On the other hand, the concept of STR was made use of to formulate environmental concern. Some Soviet authors held that this revolution generates ecological contradictions under socialism like in capitalism (Ziegler 1987: 25). However, the official line was that STR taking place under socialism would be capable of solving the problems. Environmental problems were described as a temporary anomaly (whereas being inherent under capitalism). Later, this rhetoric (or analysis) formed Soviet behaviour in international organisations. It made environmental protection one of the fields in which the Soviet Union wanted to show its superiority. The bi-effects of this were that environmental activities gained some acceptance and that links between Soviet and foreign specialists were established. Communities resembling Haas’ transboundary “epistemic communities” emerged (see chapter 3.2).

To summarise, the officially sanctioned concept of STR had effects on environmental protection in three main ways. Firstly, it provided new frameworks within which environmental concern could be voiced. Scientists and scholars could voice their opinion more distinctly than before. Secondly, the STR leads to new types of production and new types of pollution. Thirdly, the STR paved the way for new environmental technologies.

6.3.6 Soviet environmental protection and international co-operation

Since the 1970s the USSR devoted attention to global questions, like food, energy, population growth, and environmental protection. The belief that socialism (especially combined with the STR) is superior to capitalism led to a wish to show off in environment matters. Soviet scientists and specialists took part in international working groups, seminars and research processes in a way that up till that period had been unseen.

In the environmental field the Soviet Union participated for several reasons. One reason was simply that transboundary pollution incurred costs on the USSR. Of greater importance was the fact that the Soviet Union wanted to break isolation. Functional co-operation on issues with a low level of conflict could spill-over into more controversial issues, like armament, the argument went. For instance, during the Strategic Arms Limitation Talks (SALT I) in 1972 the senior staff worked on high level politics, like disarmament and Vietnam whereas the junior staff worked on lesser agreements, more precisely on co-operation within medical science and public health; environmental protection; and the prevention of incidents on and over the High Seas. This led to the concurrent signing of the SALT I agreement and the US-USSR Agreement on Co-operation in Environmental Protection concluded in May 1972 (Nogee and Donaldson 1986: 263; Ziegler 1987: 136).

6.4 The instruments of Soviet environmental protection and their use

Physical and other planning

The December 1972 a Joint Resolution between the Central Committee of CPSU and Council of Ministers introduced obligatory planning of nature protection and nature use measures in the state

plans on economic and social development. The nature protection plans forming part of this system were to be legally binding (Brinchuk 2002: 81). The 1972 resolution was followed by another one in 1978 (“Resolution on additional measures to strengthen nature protection and improved nature resource use”) which introduced the “integrated territorial schemes for nature protection” as a new instrument to strengthen planning. Ministries and sub-ministerial administrative structures (vedomstva) were obliged to set up long-term as well as annual draft plans for the protection of nature on the given territory. It was opened up for the possibility of moving a polluting enterprise out of town or changing its production to reduce the most serious anthropogenic impacts locally.

In 1982 environmental planning was introduced as a part of the business production plans, general city development plans, regional location and development schemes. The relevant industrial branch ministry and the executive branches of the elected councils at local and regional level worked out these plans. The State Planning Committee (Gosplan) included environmental plans into their activities (Golub & Kolstad 1995).

Control and monitoring

As noted above, in 1949 USSR the Council of Ministers passed a resolution on anti-pollution measures, basically restricting the building and re-building of industries that let out waste gases. The concept of a “maximum permissible concentration” (PDK) was developed as a standardised evaluative criteria (see sub-chapter below). Follow-up responsibilities were dispersed on several agencies.

In the December 1972 Joint Resolution local and regional committees of the ruling party together with the relevant ministries were urged to intensify work with the environment. Tasks were specified. Gidromet – the Committee on Hydro-Meteorology (hitherto under the Ministry of Health) – was now made an attachment to the Council of Ministers which made its work much easier since it no longer met the hindrances associated with crossing ministerial borders to interfere in other ministries’ affairs. Gidromet now was instructed to organise a Union-wide monitoring and control systems for levels of air, water, and soil pollution.

The USSR State Committee for Science and Technology was vested with the co-ordination of research on conservation and the rational use of natural resources. The Chief Administration for the Development and Production of Gas-Purifying and Dust-Trapping Equipment under the USSR Ministry of Chemistry and Petroleum Machine Building

was responsible for supervising the operation of purification equipment (Ziegler 1987: 82).

In 1978 another Joint Resolution on the environment was passed. This time steps were taken towards centralising the environmental sector. Already calls for a single super-agency for environmental protection had been voiced by environmentally concerned specialists and activists. Gidromet strengthened its position as the environmental agency (Sobol' 1999). From now on Gidromet's full name was the *State Committee on Hydro-Meteorology and the Environment* (author's emphasises). Being a *State Committee* (agency immediately below the status of ministry) its status and ability to act across ministerial boundaries was raised. State Committees provided central authorities with a means to control the entire ministerial structure. The explicit reference to environment underlined the official recognition of environmental protection as an important policy field, which was further emphasised by the fact that public funding from now on was set aside to finance measures to protect air and water. Hitherto enterprises had had to use their basic funds for this purpose.

Gidromet was mainly assigned responsibility for air pollution. The Council of Ministers' Commission for the Supervision of Industrial Supervision and Mine Safety was also an actor in this field.

The main role in fighting water pollution was given to Gossanëpidnadzor (the Sanitary Epidemiological Supervision under the Ministry of Health), but responsibilities were shared with the Ministry of Land Reclamation and Water Resources, Ministry of Agriculture, and Ministry of Fish Industry (and others). Similarly, the protection of forests and soil was the task of several ministries and agencies.

It is worth noticing, however, pollution control was but one among several tasks of the Gidromet and the Gossanëpidnadzor. Only ten percent of the employees in Gidromet actually worked with environmental pollution. Similar figures apply for Gossanëpidnadzor that mainly worked with hygiene and disease-control measures (Ziegler 1987:65).

Furthermore, if the actual volume of fines paid is to be taken as an indicator of the level of control, control was weak. Fines were small, in most case 50 rubles, and for more serious offences 100 rubles (at the time, i.e. mid-sixties, about 110 US dollars). As noted by Marshall I. Goldman (1972:35), such sums are negligible as compared to what an enterprise director gains from keeping production on a high level, the main concern and indicator of success in the Soviet economy.

Economic instruments

Economic instruments formed part of the environmental protection system during the last decades of the Soviet Union. Ziegler (1987:99) identified a certain disagreement between pro-environmental economists and legal scholars. The economists emphasised the need to develop economic incentives whereas the legal experts favoured perfection of environmental law and a super-agency for the environment.

Gossanëpidnadzor had the authority to impose insignificant fines, but in general, the system was based on self-regulation. Industries utilising nature resources were expected to do that in a rational way. They were to police themselves. The problem was that all rewards (money and reputation) were tied to exploiting nature, in practice there were no penalties for over-exploiting.

The Law on Air Quality of 1980 introduced a system of standardised norms throughout the USSR for maximum permissible concentration of pollutants. Stricter norms may be used region-wise. Norms for *maximum allowable emission standard* (PDV) are established for all stationary sources and means of transportation. PDV was held to be more sophisticated than the already existing maximum permissible levels of concentration of pollutants (PDK) in the ambient air. PDV focuses on what is actually discharged at the source, not only on the concentration of pollutants (more on PDK and PDV in the sub-chapter immediately below). Emissions for stationary sources are individually authorised by state agencies. New and reconditioned enterprises could be denied authorisation, old one shut down if requirements are not met. However, in addition to these instruments of control economic instruments were introduced. A small article in the law opened up for the use of economic instruments. The union republic and union government were empowered to establish material and moral incentives for implementing the law (Ziegler 1987: 89). Damages had to be compensated. Apart from this only administrative arrangements were used to achieve compliance.

Among the six USSR environmental laws passed between 1968 and 1980 listed one on forests (and later, the one on water) included economic instruments/charges on use (Ziegler 1987: 87). The Principles of Forest Legislation of 1977 introduced fixed rates for the use of standing timber.

The 1970 Principles of Water Legislation introduced water use free of charge for public organisations, enterprises and the public at large. It was possible to impose fees, although modest. Water was to be used

for the purposes granted, water should be used rationally, and steps should be taken towards cessation of discharge of pollutants. No economic instruments (violators criminally or administratively liable, but no economic charges to compensate for losses).

A Joint Resolution of 1979 introduced water charges for industrial enterprises (excluding the agricultural enterprises) at a certain rate per cubic meter up to a ceiling established by the Ministry of Land Reclamation and Water Resources. Water use above the norm incurs a 400 pct surcharge for most enterprises.

Voluntary agreements

In the USSR administrative processes, both formal and informal, were far more important than litigation. As shown in chapter 4.2.4, agreements were in use on a regular basis.

Informational instruments

Political socialisation through information and upbringing measures played an important role in the Soviet Union. As noted by Ziegler (1987: 94ff), new legislation often served more to emphasise the importance of an issue than to regulate potential conflicts within the policy field covered by the law. Soviet legislation often aimed at educating people, showing what was considered correct, pointing at goals, rather than prescribing feasible ways to regulate.

The population at large were activated through several institutions, like the people's control committees, the nature protection society (with 33 million members in the USSR) and the cultural protection society.

6.5 Conclusion on Soviet environmental protection

So far this chapter has shown that environmental protection did exist as a policy field in the Soviet Union, and it bore the stamp of that state's political, economic, and social system.

To summarise, Soviet environmental protection was a) partly tightly connected to nature resource use; b) partly linked to sanitary-epidemiological issues c) in general administratively dispersed; d) to a large degree based on self-regulation within each branch and enterprise; e) less based on litigation than on administrative processes; and f) purely technical and scientific g) its pressure groups were pre-

dominantly intra-system, but reform-friendly h) with an ethno-nostalgic, alternative current in Russia, Latvia, and several other union republics.

Before the establishment of a separate environmental agency in 1988 environmental protection was dispersed on several agencies, with the Sanitary-Epidemiological Supervision and the Hydro-Meteorological Services as the main actors, both doing control and monitoring. The two agencies were bearers of two distinct environmental ideologies, “public health” and “growth with protection” respectively. Those in favour of a stronger emphasis on environmental protection did argue within these two frameworks, and their rhetoric on doing things in a more rational way echoed the official rhetoric since the 1960s on switching from “extensive” to “intensive” production, i.e. economising with natural resources and energy, developing advanced technologies, making use of science.

The environmental rhetoric linked up with the progressive reform economists (Kagarlitsky 1989: 191ff) who developed models for modernising state socialism. In fact, economists in general supported the idea of payment for nature resource use since the 1960s (DeBardeleben 1990). The environmental pressure group fitted very well into the perestroika, as it will be shown below.

Unlike the Western parts of the industrialised world where strong anti-capitalist, often combined with anti-modernist tendencies, set the pace for the environmental movements, the Russian mainstreams of Russian environmentalists all the time saw modernisation as part of the solution. Therefore, the background for making use of ecological modernisation was different than in the West.

As noted above, the “Western” ecological modernisation consisted in a compromise between the environmentalists who hitherto had been presenting uncompromising criticism and the authorities, hitherto underestimating the profundity of environmental problems. In the late Soviet Union the proponents of stronger environmental policies and the reformists within the establishment found common ground, and in fact this ground was not very different from the one defined by Hajer (1995:65):

Table 6.1 *“Ecological modernisation” compared to “late Soviet technocratic environmentalism”*

Ecological modernisation	Late Soviet technocratic environmentalism
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<ul style="list-style-type: none"> • Regulation of the environmental problem appears as a positive-sum game • Pollution is a matter of inefficiency • Nature's balance should be respected • Anticipation is better than cure • Sustainable development is the alternative to defiling growth 	<ul style="list-style-type: none"> • Control at the source of pollution • Economic use of resources ("rational resource use") • Principle of «polluter pays» through pollution fees • Decentralisation of decision-making • De-concentration of state administration
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The environmental sector in the Soviet Union had several policy instruments at its disposal. The system of control and monitoring was elaborate, but the lack of differentiation between the polluters and the controllers (much was left to the polluter to control) the system was lax. Economic instruments were introduced, although on a small scale.

Also here the weak differentiation made it a weak instrument. Elements of environmental impact assessments were introduced piecemeal in several legal acts concerning the environment. The full-scale use of EIA met hindrances due to the strictly formalistic concept of what is relevant knowledge and weakly developed social and human sciences left over from the Soviet epoch. EIA bases itself on intensive use of various types of knowledge, not only natural scientific, but even the subjective attitudes of the affected public are taken into consideration. The ingrained Soviet attitudes on what type of knowledge that can pass as serious, not only made the introduction and actual use of modern environmental policy instruments difficult. It also undermined the development of a pro-environmental epistemic community cutting across scientific delineations.

The recourse to hierarchy under state socialism also created a barrier to the development of a strong pro-environmental community that could pave the way for full-scale introduction of NEPIs. Nevertheless, as argued above, a reform-minded, technocratic pro-environmental current did exist. The perestroika period offered ample opportunities for this group.

6.6 The environmental sector during perestroika

The period of perestroika (restructuring) in the late 1980s went to the core of state socialism and aimed directly at changing the basic givens of that system. The traditional streamlining of opinion was considered to be harmful. Instead openness (*glasnost*) was to be the ideal. The organisation of productive enterprises as being parts of industrial branch ministries was to be replaced by independent enterprises controlling their own incomes and costs (the principle of self-accountability, or *khozraschët*). The rigid hierarchy in all political and administrative matters was to be softened.

In other words, if successful perestroika would have paved the way for NEPIs to function because it would have led to differentiation, and *glasnost* would have enabled the emergence of open policy coalitions and a policy style in which elements of governance could have found their place.

As a part of the new openness and critical self-reflection that constituted the Gorbachëvian principle of “*glasnost*”, the environmental issue was brought to the fore by grass root initiatives (DeBardleben 1992, Ziegler 1992, Peterson 1993) and scientist involvement (Lemechev 1991).

In fact, environmentalism was a main driving force during the period of perestroika. This held true all over the Soviet Union. Both in Russia and Latvia environmentalist groups were active. Larger parts of the population than ever before and after were engaged in all kinds of environmental issues, from the protection of Hôtel Europe in Leningrad or wooden church architecture (“*zodchestvo*”) in the countryside to fighting polluting enterprises doing harm on the local population, and even, as was the case in Riga, fighting a planned metro system. The environmental issue was useful for the reformers because the population was putting pressure on old power-holders to open up for information. Even more important, the alliance between reformers and environmentalists lived on in a common demand for more rational production.

Central authorities (i.e. the Central Committee of the Party and the Government) acknowledged that current environmental polices were inefficient. The reasons for this, they held, were weak legal regulation of nature use and nature protection and incomplete organisation of state management in this sphere. Poor financing of pro-environmental

activities and lack of economic stimuli to save natural resources were emphasised as problems.

In order to make up for these shortcomings the above-mentioned supreme decision-making organs passed a resolution on “the Radical Restructuring (Perestroika) of the Nature Protection in the Country” (7th January 1988). The resolution contained two substantial provisions in addition to the call for a draft USSR Law on Nature Protection. (The existing laws from the early 1977’s applied only for the Union republics, and regulation in the environmental sphere was made through joint resolutions of the Central Committee and Government).

First, the environmental sector was to be unified in one State Committee on Nature Protection and Nature Use, Goskompriroda. Several nature resource use institutions were amalgamated into the new state committee, state committees had and still has the rank immediately below that of a ministry.

Secondly, economic instruments were introduced in full, first of all to secure a more efficient use of natural resources. Payment was to be made both for the use of natural resources and for pollution. In fact, the resolution of radical restructuring of the environmental protection system declared that the Soviet Union was in need of “a resolute transfer from predominantly administrative methods to predominantly economic methods in the management of nature protection activities” (Brinchuk 2002: 409).

6.6.1 The State Committee for the Protection of Nature – Goskompriroda

The new agency – Goskompriroda – gathered all main issues pertaining to environmental protection and nature resource use. This was a huge task. For instance, the task of gathering and systematising information had been taken care of by 1,000 institutions under no less than 70 different ministries and agencies with different policy objectives, methods and standards (Peterson 1993: 166, referring to *Sovetskaia Kul’tura*, August 5, 1989). Ziegler (1987: 62) refers to a US research project that identified 329 research establishments in the Soviet Union dealing with environmental matters

Goskompriroda assumed most of the functions that hitherto had been under the state meteorological service (Gosgidromet), the ministries of fisheries and water resources and the agency supervising the agriculture.

It was under the purview of Goskompriroda to:

- develop environmental protection and remediation programmes
- monitor environmental quality and the use of natural resources
- set norms for regulating pollution output and the use of natural resources
- conduct environmental impact studies (ecological expertise) of proposed development projects and existing industries
- issue permits for disposal of toxic wastes, pollution emissions, geological prospecting and other nature use
- manage plant and animal resources, nature reserves and hunting
- administer international agreements on nature protection (Peterson 1993: 160)

The Goskompriroda was equipped with de-concentrated field offices at union level as well as regional level. Some republics already had their republic level Goskompriroda, in some cases since the 1960s (Sobol' 1999). Ukraine, Belarus, Lithuania and Estonia had their own republic committees for nature protection (in the Estonian case a ministry of forestry and environmental protection). Russia and Latvia did not.

With the Goskompriroda a unified policy sector was created with its own budget, its own staff, its own premises, legal provisions and routines. Moreover, a basic precondition for the development of environmental advocacy coalitions was established. There was, however, no single branch of the educational system that supplied the sector with professionals. There were ecological departments at several universities, but they did not train students in practical evaluation of impacts, nor were the "politico-administrative" and economic aspects paid attention to (see also chapter 4.2.5 and 6.3.5). This latter fact significantly hampered the efforts to convert environmental knowledge into action. The effects of the weakness of applied social sciences in the Soviet Union on post-Soviet environmental policy sectors should be noticed (Holm-Hansen 1997).

Despite the imbalance between the weak knowledge base drawn from social sciences and the strong basis in theoretical natural science, the new agency established itself as being internationally updated from the very start. Goskompriroda thus was structured to tackle environmental problems comprehensively and not separately according to the medium (air, water, soil). According to D. J. Peterson (199:160) it "reflected a progressive, systemic approach to

environmental protection” even to the extent of surpassing the US environmental authorities. In other words, there is reason to bring all the nuances into the presentation of the relationship between the lending and the borrowing setting.

There was, however, a problem with trained personnel, in particular at regional level. After some years, it became evident that the state committee was not able to control efficiently the environmental policies pursued by industrial ministries. Therefore the committee was elevated to a ministry, the USSR Ministry of Environmental Protection and Rational Use of Natural Resources. This ministry was copied in the Russian republic.

In Latvia, a Nature Protection Committee with regional structures was established in 1988 under the Council of Ministers (i.e. the Government). The new agency secured a shift from sectoral approach to one above and across industrial branches. In 1990 the Environmental Protection Committee was established, this time under direct supervision of the Supreme Council (i.e. the National Assembly). This agency continued and developed the previous policies. The fact that it was made an agency under the republic’s parliament was to secure insulation from the industrial ministries that formed part of the all-Union economy (Vesere and Brunenieks 1999: 194).

6.6.2 Development of new environmental policy instruments during perestroika

Economic instruments

As shown above, in the Soviet Union prior to perestroika economic instruments had existed on a small scale, and they made little impact on the polluters. Among others fines were small, and if they had been more substantial, they would have not made much of a threat since the polluting enterprise was not an independent economic actor. With *khozraschët* the threat of being fined had to be taken more seriously by the enterprise since they now were made financially accountable. In fact, as noted by Joan DeBardeleben (1990) the core of the environmental strategy under Gorbachëv consisted in creating the incentives to produce self-interest in environmental protection.

Full scale use of payments for nature resource use was introduced with the Law on State Enterprises in 1987. This law was a cornerstone in perestroika since it opened up for and structured differentiation in the productive sector into separate, accountable enterprises. It was

significant that the nature resource payment issue was regulated in this law. Interestingly, there was a debate on the terms according to which payment rates were to be set. DeBardeleben (1990) refers from this debate. Already at this stage economists discussed whether payments for pollution over the PDK should be higher than the cost of introducing pollution abatement equipment (later on, as it will be informed below, fines and fees could be converted into abatement measures). In 1988 and 1989 economists suggested that parts of the payment should go to the local soviets before being reinvested in cleaner or cleaning technologies (DeBardeleben 1990), in other words environmental funds (later to be introduced).

Role of local self-government

A particular feature of perestroika was the new role assigned to the local soviets (elected councils on territorial basis). Not least in environmental protection this shift made a difference. The local self-government was much more prone to take local effects of pollution seriously than would the industrial branches. The June 1987 Plenum of the Central Committee it was decided to strengthen territorial planning.

6.6.3 Summing up on environmental protection under perestroika

Perestroika is important for the purpose this theses for several reasons. First, the restructuring addressed directly the core elements of state socialism and identified them as problems. This was the case for the three characteristics that this thesis assumes create problems for NEPIs to function because they left legacies. These are the low level of differentiation under state socialism, the hierarchical policy style, and the hindrances for cross-cutting epistemic communities to develop. All three aspects of classic state socialism were explicitly challenged by perestroika.

Secondly, perestroika and environmentalism went hand in hand. Popular environmentalism (on the grounds both of public health and conservationism) helped reformers in the Party leadership and apparatus by applying pressure for more openness and more rational methods of production. If bridging the gap between environmentalism and authorities is one of the features characterising NEPIs this certainly was a reality under perestroika.

Thirdly, the actual development and introduction of policy instruments similar to NEPIs took place under perestroika. They were

introduced after having been recommended and debated thoroughly in the domestic setting.

The post-Soviet instruments after 1991 therefore have been either continuations of already existing instruments or they have been introduced into a setting in which new instruments developed domestically had been in operation for a while. This fact is important to keep in mind when analysing policy transposition of environmental instruments in states that used to be a part of the Soviet Union.

6.7 Post-Soviet environmental protection in general

The Soviet Union was dissolved in December 1991, but in September the same year Latvia had re-gained full independence. Both Russia and Latvia started out as separate states with the environment high on the agenda. Environmentalism had played an important role in the rhetoric and activities that preceded the dissolution of the Union. Furthermore, internationally at the time environmental protection enjoyed a prominent status. Environmental concern was on the rise in Western Europe and Northern America. These were the two regions Russian and Latvian policy-makers looked at for advice, inspiration and models when reshaping, reorganising and equipping their environmental sectors with new instruments.

In the West at the time a new dynamism characterised the environmental policy field due to ecological modernisation. The phenomenon of making use of low policy areas like environmental protection to further wider co-operation and integration was known since *détente* and was used in full measure after 1991. This applied for Latvia that belongs to the Nordic-Baltic region in which environmental protection was made a common concern and followed up with financing. For North-West Russia, in which the Arkhangelsk region is included, environmental protection formed part of the core activities of the Euro-Arctic Barents Region. In other words, the framework for policy transfer was soon established and underpinned.

Partners on both sides of the defunct East/West dividing line found in environmental issues a common platform. Environmental concern was a universal phenomenon above out-dated cultural and political legacies – at least, to judge from the accompanying rhetoric. On both sides actors found it opportune to make as if environmental protection was a *tabula rasa* in the East. Western actors (politicians, consultants,

NGOs) were eager to introduce “their” models. Understandably, Eastern actors (politicians, civil servants and environmentalists) were eager to attract funds, generate trips abroad and create new jobs for themselves. However, optimism soon changed with the growing awareness of significant cross-national differences in the way the basic concepts of “the environment” and “environmental knowledge” was perceived.

6.8 Post-Soviet environmental protection in Russia

6.8.1 The environmental agency

The establishment of Goskompriroda in 1988 was a huge step for Russian (and other Soviet) environmental protection because it centralised and concentrated the responsibility for the policy field that hitherto had been scattered on agencies for hydrometeorology and public health on one side and the polluting industrial branches on the other. The fact that the new agency was above and covered all branches and administrative departments (in Russian it was *mezhotraslevói* and *nadvédomstvennyi*) was very significant in the Soviet setting because it entailed *differentiation*. How did the central agency for environmental protection in Russia fare after the dissolution of the Soviet Union?

Central level

In 1991 the Goskompriroda was made a fully-fledged Ministry of Ecology and Natural Resources. In 1992 it changed its name into one more compatible with international terms: Ministry of Environmental Protection and Natural Resources. In 1993 the Ministry lost the responsibility for nature resource use. As noted by Brinchuk (2001: 233) these were the functions that formed the basis of Goskompriroda in 1988. From now on nature resource use organs were separate from nature protection organs.

In 1996 the Ministry for the Protection of Environment and Natural Resources was degraded to its former status of a State Committee, this time called Goskomèkologiiia. At the same time the nature use organs (the State Committee on Water Management; the State Committee on Geology and the Use of the Subsoil) were made the basis for the establishment of a Ministry of Nature Resources (Brinchuk 2001: 233). The task of this new ministry is to attract investments in the

exploitation of new deposits and secure water supply by the use of new subsoil sources, but also to make sure the environment is protected. In fact a certain overlap between the state committee and the ministry (plus the state committee on soil resources and the federal forest service) was observable. Nevertheless, this «stripping» of duties related to the exploitation of natural resources (particularly geological) from the Ministry for the Protection of Environment and Natural Resources was considered a major set-back for the environmental issue, but more was to come.

On 17 May 2000, a presidential decree was issued “On the structure of federal bodies of the executive authority”. Among the changes in the system of federal ministries and state committees the abolishment of the Goskomèkologiia was most controversial.

The decree implied a massive reorganisation and streamlining of the State bureaucracy in general. For the environmental sector of public administration the decree was a major set-back. The State Committee on Environmental Protection (Goskomèkologiia) was abolished. Its functions were merged with those of the Ministry of Natural Resources.

Regional level

The regional committees of environmental protection (ecology) had existed since the establishment of Goskompriroda in 1988. As a result of the 2000 decree, the regional level committees of environmental protection were dissolved and their functions were taken over by the regional committees of natural resources. Even before that, environmental officers and environmentalists complained that the environmental committees never were allowed to establish themselves as the chief co-ordinating organ of environmental protection. Nature resources use, geology, water, fishing, forests, hunting all had their own administrative organs.

In other words, not only at federal level, but also in the regions (federation subjects) the tendency towards crystallisation of a separate differentiated environmental agency operating above and between the industrial branches and organs of public authority was reversed, but not halted. Environmental legislation was still in force and experienced environmental officers continued their work in the new committee.

The regional level committee has been an important actor in Russian environmental protection responsible for the actual implementation of environmental policies that are laid out in general terms at federal

level. For instance permits as well as fees and fines are under the responsibility of the regional committee. In most regions, like in Arkhangelsk, the committee is partly an implementing organ for the federal structures (ministry), partly for the regional administration. The main function, however, is to be the federal level representative of the policy sector at regional level. Among environmental officers this was considered an advantage. The function of controlling industry, which sometimes can be accused of hampering development, makes a direct subordination to the oblast not suitable.¹¹ Regional authorities are considered to be very close to the industries that dominate the regional economy. The environmental officers still carry some clout at regional level (more on the regional level in the chapter on the Russian industrial town).

Local level

In a process that started in the late 1990's, the environmental committees were abolished at the local level. Throughout the 1990s, they had served as de-concentrated field offices of the central environmental authorities. As a result of the 17 May 2000 decree, in some towns the employees switched into working for the local self-government, or they continued working as inspectors, only now under the regional committee that took over the function of state representative in environmental matters. For most of the period covered by the present study, 1997 to 2001, decentralised units of the central environmental authorities operated at local/town level in Russia (see chapter below on the Russian industrial town).

The development of the agency for environmental protection

The immediate effect of the changes is that the environmental sector is less present and less visible at the local, regional and federal levels. To some extent, the environmental sector has moved not only *from*, but also *at* the local level due to the establishment of an environmental unit under the local self-government council. Such units have also been established at regional level.

The dismantling of a separate environmental sector in Russia's public administrative structure did not come like a bolt out of the blue. Throughout the latter half of the 1990s, the environmental sector had seen substantial cutbacks as part of the streamlining of the public administration in general. The central apparatus of the Goskomëkologiia had 630 staff members in 1994, but only 330 by

¹¹ Conversation 24.X.1997 in Arkhangelsk with Viktor S. Kuznetsov, vice-head of the Arkhangelsk Committee on environmental protection.

1999. The number of State employees in the “territorial units” of the Goskomèkologiia diminished from 11 624 in 1994 to 5 400 in 1999 (Goskomèkologiia Rossii, 2000).

The weak position of environmental protection as a policy field was lamented by the chairman of the Goskomèkologiia, V.I. Danilov-Danil'ian, in his annual statement in February 2000. He predicted that environmental protection was still going to become a national issue. The only way to make environment stronger as a policy field was to strengthen non-state (“social”) organisations. Apparently, the chairman of Goskomèkologiia was thinking in terms of alliances and networks across the dividing lines between the state and civil society. In fact, the dismantling of the Goskomèkologiia and its committees led to a strong NGO protest nation-wide. The voluntary environmental groups and organisations organised an extraordinary conference which demanded that the president “restore the independent federal system of specially authorised organs of environmental protection”¹². There was a feeling among environmental activists that they had lost “their part” of the State, although prior to the decree, they had been very critical of the environmental authorities for being too “soft”.

6.8.2 The environmental instruments in post-Soviet Russia

Legal basis

The Russian Law on Environmental Protection (19.XII.1991) is very general, and it has been revised throughout the 1990s. Nevertheless, it as an important step to overcome the previous situation in which different “branch-laws” about nature resources were prevalent to the detriment of integrated protection of the environment (Marieva 1999). It is the basic law and it sets the division of tasks between the levels of governance. In addition to the Law on Environmental Protection, several acts on environmental matters have been passed in the 1990s, among the Principles for the forest legislation, the Land Code, the Water Code, Laws on the sub-soil, on the sanitary-epidemiological well-being of the population, on protecting the health of the citizens and others (Bogoliubov 1999: vi; Brinchuk 2001: 116–119). The Law on Ecological Expertise was passed on 23.XI.1995.

¹² See Vesti SOÈS May–June 2000, “Nikto ne dast nam izbavlen'ia...”

Economic instruments

The economic instruments have a double function. They both aim at deterring polluters from excessive pollution, and they help finance environmental action.

In Soviet times all environmental protection was financed directly by the state. Now, funds are drawn from various sources. Direct financing from «the budget» in combination with the Eco-Fund are important. Also donations and loans from foreign sources are important for carrying out specific projects.

The system of payment for pollution and other use of natural resources developed on a small scale in the Soviet times. With the Law on Environmental Protection of 1991 it was introduced on a full scale. The system includes:

- fees for the use of natural resources
- *fees for pollution* and other harmful impact on the environment
- fines for infringements of norms and regulation for rational nature use
- payments to mitigate harm on the environment

The *fees for pollution* are levied for emissions into the air, water and soil as well as for waste disposal. Guidelines for how to establish the level of payment were given in 1992.¹³ The fees for pollution are of two types, a) within the norms, and b) within limits agreed upon temporarily. The norms are established for each of the ingredients of the polluting substance according to its harm on human health. Local and regional specificities (as to climate and the importance of the local environment) are taken into consideration when establishing the norms.

The system of environmental norms and standards

Norms and standards are basic elements in the use of various environmental instruments. This applies both for direct control and for economic mechanisms. Licenses, fines as well as fees are calculated on the basis of the norms and standards (PDK and PDS/PDV). “PDK” is the core standard within Russian environmental protection (PDK is the Russian abbreviation for “maximum permissible concentration”).

¹³ “Poriadok opredeleniia platy i eë predel’nykh razmerov za zagriaznenie okruzhaiushchei sredy, razmeshchenie otkhodov, drugie vidy vrednogo vozdeistviia”. Postanovlenie (resolution) from the RF Government 28 August 1992.

It is very well established since it was introduced as early as in the late 1930s for water and the 1950s for air (Brinchuk 2002: 291).

It works like this: For each polluting substance, a PDK is stipulated. Scientists determine the *minimum* concentration of a pollutant necessary to cause initial harmful reactions in test subjects and set the PDK at that threshold. PDK are set to protect the human organism, the “genetic fond”, flora and fauna from harm. PDK are strict. PDK was traditionally applied at several levels: Union; industrial branch; union republic and plant. The Institute of Hygiene in Moscow, part of the sanitary-epidemiological structures (Gossanèpidnadzor) under the Ministry of Health, traditionally plays a major role in stipulating the PDK. Also other institutions take part, reflecting the “competition” between the sanitary-hygienical (public health) perspectives and the nature protection perspectives.

PDKs have been established for chemical substances, micro-organisms and other biological substances, and indicators have been devised for air, water and soil. For discharges into the air, PDKs have been stipulated for 479 harmful substances, for water, there are PDKs for 1925 substances and for soil 109 substances (Bogoliubov 1999:103). There are two PDK standards. First, the maximum one-time PDK stipulates what discharge level a human being or nature can tolerate over a short period without suffering harm. Second, the average 24-hour PDK stipulates what discharge level an organism can tolerate over time.

In addition to PDK (“maximum permissible concentration”), there is “maximum permissible discharges”. These latter are abbreviated PDV and PDS for discharges into air and water respectively. There is a fundamental distinction between these latter and PDK. Whereas PDK refers to the *concentration* of polluting substances (gram/per m³), PDV/PDS denote a limit on the *actual discharge* (gram/second) from a specified source. The PDVs and PDSs for chemical substances are set by the environmental authorities, and by the sanitary-epidemiological authorities for micro-organisms and biological substances.

PDK and PDV/PDS are basic tools in the hands of the environmental and sanitary authorities. For each enterprise, the regional environmental committee stipulates PDVs/PDSs for each pollutant. The PDVs/PDSs are set in co-operation with the ecological service unit in the polluting enterprise and the Environmental Committee in the town. The levels are confirmed by the Environmental Committee at regional (i.e. Federation subject) level. Where an enterprise’s

emissions exceed the PDV/PDS, rates are five times higher than the basic rate. PDVs/PDSs are stipulated on the basis of scientific knowledge regarding what nature and the human organism can tolerate. Thus they are well suited for an ideal situation in which enterprises run smoothly. There is, however, also the question of what enterprises can tolerate. As a result, crisis-ridden post-Soviet enterprises have been given so-called “temporary compliance levels” above the PDV/PDS norms. When the temporary level is transgressed, the penalty is 25 times the basic rate.

The Russian norms, PDK as well as PDV/PDS, have been criticised for being draconian. Furthermore, they are the same all over the vast federation despite the extreme variations between Russian regions in terms of topography, climate, geography and the importance of the local environment. Therefore, there is a danger that environmental officers and experts in several regions spend their time reducing pollution that does little harm in its actual context (Zeleznev & Zelezneva 1998).

The Eco-Fund

The system of Ecological Funds (Eco-Funds) is founded on the 1991 Law on Environmental Protection and a Governmental Resolution from 1992. They were introduced with the environmental restructuring from 1988. At the time the eco-funds were called “reserve funds for the protection of nature” (Bogoliubov 1999:87).

Until 2000 the Eco-Funds were so-called “extrabudgetary”, which meant that they were independent. The Budget Code from 1 January 2000 listed the extra-budgetary funds: the Eco-Fund, the pension fund, the social insurance fund, the fund for compulsory medical insurance, and the employment fund. In 1991, however, the federal level Eco-Fund was abolished. Hereafter the funds gathered for pollution and nature use were to be distributed to the federal budget (10 percent) and the budget of the federation subjects (81 percent). At federal level the Eco-Fund had been a budgetary, but earmarked fund since 1995. At regional level since 2000 the fund is a part of the budget, but there is nothing that inhibits the regional authorities from establishing an earmarked fund¹⁴.

¹⁴ This, however, may be difficult for regional lawmakers to accept. See e.g.: the regional paper of Arkhangelsk “Volna” 20. November 2001, where the chairman of the permanent planning and budget commission of the Regional Assembly refers to a disagreement between “biudzhetniki” and “ekologi” (i.e.

The federation subjects were given the right to distribute the funds between the level of federation subject and municipality. There was, however, a distinction between the money gathered as payments (fees) on one hand, and fines on the other. Payments are to end up in the federal and regional budgets, whereas what is paid as fines are to be spent in the municipality where it was levied.

Until 2000, in all 90 percent of the means that are gathered as fees for pollution according to the Law on Environmental Protection ended up in the extra-budgetary ecological funds. The remaining ten percent went as earmarked means to the federal budget for use within the field of environmental protection. The Water Code operates with a different norm of distribution for payments for emissions of waste water. Furthermore, here receivers were the budgets, not the eco-funds (ten percent to the federal budget; 30 percent to the federation subject and 60 percent to local self-governments). No less than 80 percent of funds entering the budgets though this channel has to be used for environmental measures.

Agreements

As it will appear here (and in the chapter on the Russian industrial town), agreements as an environmental instrument is tightly connected to the economic instruments. The polluting enterprise (usually called the “nature user”) makes an annual plan indicating the size of payments to be made (each quarter of a year). This plan is confirmed by the enterprise executive director and the chief accountant. The plan is harmonised with the regional committee of the Ministry of Nature Resources (before 2000 with the regional committee of the Goskomèkologija) and the organs of the executive power at regional level (i.e. federation subject).

These two latter organs are also the decision-makers on reduction of payments on the condition that environmental improvements are made for a sum similar to the reduction. As noted by Klarer and Lehoczki (1999:34) in the East and Central European countries emission charges and some non-compliance fees include the possibility of full or partial exemptions from charge payments on the condition that the polluter undertakes some abatement investment accepted by the authorities.

In Russia, environmental measures eligible to actuate charge waivers are listed in an “Inventory of environmental measures” (Elizarova

environmental officers) over earmarking of funds gathered as environmental fees and fines (see also chapter on the Russian industrial town).

2002). This is a way of making sure environmental steps are taken by the polluter himself. On the other hand, the money would have ended up in the Eco-Fund for environmental purposes anyway. These purposes, however, may be less direct than “payment waiving” in change for environmental improvement by the polluter. Typical measures eligible for payment reduction are:

- reduction in the amounts of nature resources used (water, air, soil, minerals and forests).
- Reduction in emissions
- Reduction of the concentration of toxic compounds
- Interestingly, not only direct measures, but also research and development may be funded by payment waiving.

Agreements are also used in connection to the licensing system (Brinchuk 2002: 356–360).

Informational instruments

When referring to information in connection with the environment in Russia, often means referring to the *right* of being informed about the state of the environment, in particular in cases of risk. The Law on Information from 1995 secures the right to information. Securing the right to information is important because it stimulates the development of “knowledge”. This thesis looks at information in the light of what it does to create a wider understanding for the environmental matters, i.e. the creation of an epistemic community in a wide sense. Here, the authorities, environmental groups, scientists are potential participants. These aspects are paid attention to in the Russian literature on the subject (see e.g. Brinchuk 2001: 264 – 284).

In this thesis’ case studies, the local environmental programmes are picked as examples of informational instruments. The programmes are not informational instruments in the strict sense since they are mainly a priority list and a means to co-ordinate environmental action on a given territory. Nevertheless, the way these programmes are set up, involving a wide range of relevant actors, gives them an additional quality, that of stimulating knowledge. The responsibility for setting up the environmental programmes is assigned to the local self-government, according to the Law on Environmental Protection (paragraph 10).

6.9 Post-Soviet environmental protection in Latvia

Even though Latvia was ruled along state socialist principles for a shorter time than Russia, both countries bring with them legacies from decades of that system (Ernšteins 1997; Ernšteins & Kudreņickis 1998; Holm–Hansen 1996, 1997).

6.9.1 The environmental agency

Central level

The Ministry of Environmental Protection and Regional Development was established in 1993 by merging the Environmental Protection Committee and the Ministry of Architecture and Construction. The composition of the ministry is interesting because it combines environmental protection with regional and local development. In the early 1990s it also included architecture and construction which made it an integrated ministry well-equipped to ensure sustainable development.

The Environmental Policy Plan for Latvia from 1995 is the basic document structuring the country's activities within the field of environmental protection. It forms the base for Environment Protection Action Program (EPAP) and Investment Programs in the environmental sector.

Regional level

There are eight Regional Environmental Boards subordinate to the Ministry (since March 2003 Ministry of Environment). Each of them covers several counties. Like in Russia these units are de-concentrated state representatives (of the Ministry of Environmental Protection and Regional Development).

According to the 1991 law on environmental protection, environmental quality norms and standards shall be determined and monitored by the regional environmental boards.

The regional boards have a department for environmental expertise and agreements (dealing with the compliance of new project to environmental norms and regulations, licensing, cadastres). Furthermore the boards have their own "ecological laboratory" and an information centre. At sub-regional level the boards are represented by "district departments", like the one in the district of Preiļi. The

National Policy Plan on Environment states that using new environmental policy instruments is a major strategy.

Local level

As described in the chapter on the Latvian industrial town, at local level environmental inspectors of the regional board operate. In addition the local self-government has got responsibilities as policy actor.

6.9.2 The instruments

The 1995 Environmental Policy Plan for Latvia refers to all general principles of modern environmental protection. For instance, so-called "end-of-pipe" solutions are rejected as being counter-productive because such solutions only consider the neutralisation of waste products after they have been discharged into the environment without looking for technological or other measures that would reduce the output of waste products in the first place. "End-of-pipe" measures should be performed only in cases when there is a direct threat to human health or the stability of eco-systems (Cabinet 1995:13).

The report sums up the environmental policy instruments as:

- the legal system
- environmental protection institutions
- economic instruments
- environmental control
- environmental impact assessment
- territorial planning
- early warning monitoring
- national programmes
- environmental education
- communication systems

It is stated in the policy plan that «as in the rest of the world, Latvian environmental law was initially closely connected with the regulation of the use of natural resources».

Legal basis

The most important of the laws regulating the use of natural resources are:

- The Law on Environmental Protection, 1991 with amendments, among others in 1997 (this is the umbrella law on environment)
- The law on Natural Resources Tax 1990, and amendments 1995 (with Regulations on the Application of the Natural Resources Tax (No 210 1996).
- Laws on State Ecological Expertise 1990 and Environmental Impact Assessment 1998
- The law on the State Environmental Inspection
- Regulations of the Cabinet of Ministers No. 415 “Regulations on the Environmental State monitoring” (16.12.1997)

Economic instruments

The following economic tools are used to implement environmental policies:

- Natural resource tax
- Exemptions from the natural resources tax
- Latvian Environment Protection Fund investments (including local funds and environmental budgets)
- Environmental Investment Fund investments (Ministry 1998:18-19)

Payments from nature resource use have been in force in Latvia throughout the 1990s, just like in Russia. The Law on Nature Resource Taxes from 1991 with thorough amendments from 1995 forms the basis for the system. The law includes differential taxation according to effluent standards, conditional allowances, and tradable rights on pollution quotas (Vesere & Bruneniekš 1999:195).

According to the Environmental Protection Plan of Latvia (1995) the use of economic instruments in Latvia “use of nature resource” is defined as:

- direct extraction of natural resources (for economic purposes)
- discharge or leakage into the environment
- consumption of goods or products harmful for the environment
- activities degrading the environment or natural resources

The system evolves around three tools: permit – emission charge – non-compliance fee. This is similar to Russia. Klarer & Lehoczki (1999: 34) notes that linking permits and emission charges is a feature

common to the East and Central European countries. Permits are obligatory for all use of nature and pollution. Enterprises must present (paid by themselves) documentation on the activities' influence on the environment (state ecological expertise) and present it to the environmental authorities (Vesere & Bruneniaks 1999: 196). Licences are issued for the use of natural resources (by the Ministry of Environmental Protection and Regional Development or organ authorised by the ministry).

The system is based on maximum permissible concentrations (cfr the PDK in the Russian case) which are established on the background of an inventory of the enterprise's pollution sources drawn up by the enterprise itself. Just like in Russia, the rates of payment depend upon whether nature use (pollution or extraction) is above or below the prescribed limit. If nature use is illegal (without licence or by handing in false information to the environmental authorities) yet another rate is applied. For nature use below limits there is a base rate. Above limits the polluter has to pay the base rate plus an extra rate (which is three times the basic rate). For illegal use a penalty rate is added, which makes the total sum twelve times the base rate (Vesere & Bruneniaks 1999: 196). The 1991 law had very low charges, which combined with inflation to make it a very weak instrument. The 1995 law on natural resources taxes improved this situation.

The Environmental Fund

Klarer & Lehoczki (1999: 36) presents the comprehensive environmental funds as a unique feature of the Central and East European countries. Above it was shown that environmental funds play a role also in Russia. Earmarking the revenues from environmental fines and fees takes place in Latvia according to the following scheme. All revenues are earmarked. Amounts paid according to the base rate are divided on the three levels of government (state, county, municipal). Altogether 40 percent go to the state-level Environmental Protection Fund of Latvia, whereas 60 percent go to county or town local authority's special environmental protection budgets where the respective activity is performed (local funds) (Vesere and Bruneniaks 1999:198).

Agreements

In Latvia, like in Russia, the instrument of setting up an agreement is intertwined with economic instruments. In the agreement the policy actor guarantees exemptions from charge if target group (polluter) reduces pollution (nature use) equalling the value of the pollution reduction. This scheme is founded on the nature resource tax law.

Informational instruments

In 2002 Latvia adopted the Aarhus Convention on public participation and access to justice in environmental matters, but also prior to that the environmental authorities paid attention to aspects of information and public involvement, not least as a part of preparations for EU membership (Ministry 1998: 21). The Aarhus Convention emphasises *information*, and strengthens the potentials of information as an environmental policy instrument.

6.10 Conclusion and relevance for the further study

The fact that environmental protection was made a central issue during the perestroika period and for a short period immediately after the dissolution of the Soviet Union might have created the impression that nothing had been done earlier to protect nature, use natural resources rationally, counteract pollution or defend people's health. As this chapter has shown that impression needs to be modified.

The Soviet Union and its constituent republics were far from being an environmental *vacuum*. On the contrary, institutional expectations, ideas about what kind of knowledge to treat as relevant, procedures, routines, linkage of environmental protection to other policy priorities, and language habits related to environmental protection were already established. Post-Soviet environmental protection instruments have had to relate to this.

Environmental concern, strategies and instruments developed within the Soviet context not totally unlike what they did in industrialised societies in Western Europe and Northern America. In particular, during the period of perestroika several instruments very similar to what has been termed "new environmental policy instruments" were introduced. The environmental policy actor in Russia and Latvia used to be dispersed on several agencies, notably the ones covering hydro-meteorology and public health.

Just like in the Western countries in the 1970s and 80s, the Soviet Union and its republics saw a concentration of the tasks of the environmental policy actor in one hand, that of the Goskompriroda. But unlike the Western European cases the processes taking place in Russia and Latvia formed an intrinsic part of the general restructuring of the Soviet society. In fact, "technocratic environmentalism" became official policy since it embodied the main elements of Gorbachëvian

thought. This is illustrated in the case of the major environmental target group, the polluting enterprises. Making them into relatively independent actors, and through that susceptible to incentive structures inherent in NEPIs, was a part of a much larger process than that of modernising the sector of environmental protection.

So, after the collapse of state socialism new environmental policy instruments had some roots in the domestic context. The case chapters below will show in what ways that fact manifested itself.

In the introduction to this chapter it was asked to what degree the development of environmental protection in the two countries did lead towards “ecological modernisation”, elements of it, or equivalents to it. That question is linked to the question of how the environmental sector coped with the characteristics of state socialism, identified above as a) low differentiation, b) difficulties in establishing non-hierarchical patterns of interaction and c) feeble epistemic communities.

When reviewing the development of the environment as an issue in Russian and Latvian public and administrative life, it becomes evident that the field has been divided between a technocratic current on one side, and a romantic current on the other. In the Soviet period the former current linked up with the “system’s” endeavours to reform itself. All the way from the debate on intensive versus extensive production, through enterprise independence to the principles of glasnost the technocratic current of environmentalism has been intra-system, but pressing for reform.

The specificities of state socialism, that underdeveloped open analysis of politics, policies and administrative matters on one side, and gave high status to purely technical insights and natural science on the other made the environmental officers (in the Gidromet and Gossanëpidnadzor in the environmental departments of the enterprises) less able to push for change and become a part of an “advocacy coalition”. They lacked the intellectual training cultivated by the modern human, social, economic and political sciences to analyse for instance the functioning of an environmental protection system.

The strong tendency towards treating any environmental problems as if it was a mere matter of natural science and ready technical fixes, made the technocratic current un-prepared for the use of NEPIs or instruments inspired by them. Neither was the romantic current ready for NEPIs since its anti-modern and moralistic pathos weakened its capabilities for political and social analysis. This was not a good point

of departure for dealing with the complex interactions foreseen in eco-modernism and the use of NEPIs.

On the other hand there were parallels to western ecological modernisation in the fact that “technocrats” and “fundamentalists” join forces in a common concern for the environment. The recognition of the environmental problems as “systemic” was similar to the development in the developed West that amounted to “ecological modernisation”.

Likewise, when it came to institutional frameworks, the post-Soviet countries have inherited patterns that, although originating from quite other sources, nevertheless may be conducive to a smooth introduction of NEPIs. The practice of making agreements between authorities and producers is one of them. Another one is the routines of internalising environmental responsibility in the industrial branch or the enterprise itself (e.g. environmental departments in large industrial enterprises).

Seen more in detail, however, there were particularities in the Soviet context that made the environmental issue end up in organisational arrangements and ideological partnerships that differ from the general picture of Western Europe and Northern America (although operating with a general picture of “the West” in environmental matters also is somewhat hasty). Both observations, that the Soviet Union followed the general pattern *and* that the development was significantly marked by Soviet particularities, form a useful backdrop for the study of how NEPIs came to work.

7 The use of NEPIs in Koriashma

The aim of this chapter, and the subsequent case study chapter on a Latvian single-enterprise town, is to provide an understanding of the relationship between the new policy instruments and the surroundings in which they are set to operate. Based on the theoretical propositions that were elaborated in chapter 2–4, case studies of two single enterprise towns in Russia and Latvia have been conducted. Methodology outlined in chapter 5 has been applied.

The chapter analyses the role of the three main environmental actors (the state environmental authorities, the local self-government and the polluting enterprises), and the ways they undertake activities as a result of the NEPIs (economic instruments, voluntary agreements, and informational devices). How NEPIs are being used is, of course, not solely, or even mainly determined by local actors. Therefore, the overall system of environmental protection and NEPIs, as presented in chapter 6, will be referred to.

7.1 Some assumptions

By way of introduction this thesis stated that the transferability of policy instruments depends upon the relationship between the new instruments and the surroundings in which they are set to operate. Therefore, a successful process of policy transfer requires a careful analysis of the setting in order to seek out features that differ significantly from the setting where the new instruments originate.

This thesis is based on three theoretical propositions that will be confronted with the empirical findings in this chapter. The first proposition is general and about the setting. It simply suggests that a societal perspective is relevant when analysing *the post-socialist setting* in which instruments are introduced in this study. A society

existed under state socialism, and followed its own dynamics, despite, and partly because of, the system's stated goals of streamlining all development under the Party's state leadership. Therefore, the institutionalised patterns of behaviour, expectations, language habits, and organisations – in short, the institutions – that permeated state socialism, struck deep roots. At the outset the thesis opens up for the possibility that these patterns may linger on in one or another form even when the state socialism that gave rise to them have been abolished.

The second proposition, like the third proposition, is specific and centres on the instruments. It suggests that NEPIs are dependent upon, on one side, actors that are sufficiently differentiated to enable policy actors make use of provision and deprivation of resources or motivation in order to make the target group (polluter) perform an activity, or refrain from it.

The third proposition holds NEPIs to be dependent on policy actors and target groups that are able to overcome hierarchy and antagonism. In fact, they base themselves upon a continuous interaction between groups and forces in society, public and semi-public organisations, institutions and authorities, private actors and interest groups.

From the theoretical propositions launched here, it is possible to infer some assumptions on what happens when the principles behind NEPIs encounter the realities of Russia.

Assumption on economic instruments: Weak differentiation prevails and hampers the use of environmental instruments

The Russian sector of environmental protection (the policy actor) has got instruments to deprive nature resource users and polluters from resources as well as to provide them with resources in order to stimulate pro-environmental behaviour. This fact enables empirical studies, like the one in this chapter focusing on Koriazhma town.

As argued elsewhere in this thesis, economic instruments presuppose the presence of certain institutions. These institutions and features have in common that they typically have emerged through that type of development which most clearly have taken place in "Western" societies. A basic precondition is a clear distinction between policy actors and target groups. Environmental authorities must be politically insulated from the polluter. The former must not be dependent upon the latter. Otherwise the practice of provision and deprivation of resources, which is what economic instruments is a matter of, would not be conceivable.

The way economic instruments work is contingent partly upon characteristics distinctive to former state socialist countries in general, partly upon features particular to Russia. Suffice it here to recall the lack of distinction between “imperium” and “dominium” in the past (see chapter 4). The assumption here is that the delineation between public administration and industrial production in Russia is blurred and that the use of economic instruments is hampered by this fact. As suggested by Offe, Elster and Preuss (1998) dismantling state socialism consists in “splitting up of encompassing and multi-functional institutional compounds into smaller and more specific units”.

In more specific terms instruments function the way they do due to the fact that distinguishing between the policy actor and the target group is a relative novelty to the Russian setting, dating from the perestroika period. In fact, it is possible to say that the distinction and the instruments were introduced simultaneously – in 1988 as part of the perestroika. Economic instruments were introduced to take over much of the functions administrative measures used to have in 1988 as a parallel to the policies of making enterprises independent from their ministries.¹⁵

The actual ways authorities and business interact – and the ways economic instruments function – is, however, not only contingent upon the *novelty* of the distinction between policy actors and enterprises. The market economy of Russia was still emerging throughout 1997-2001, and ownership issues were not always settled, as the Koriakhma case illustrates. Demarcations between ministries and enterprises may still be unclear. In particular this may be observed in the relations between the main environmental policy actor – the Ministry of Nature Resource Use and Environmental Protection – and some of the potentially most environment-unfriendly businesses – those of nature resource exploitation.

All this is not to state that economic instruments can not be made to work in Russia. Russia, like other countries, has adapted text-book instruments to fit to its particularities. The question is what happens when the instruments meet the context. Being an archetypical single-enterprise town Koriakhma offers suitable conditions for the observation of these processes. Russian single-enterprise towns – or

¹⁵ A governmental resolution (postanovlenie) of the USSR was passed on 7 January 1988 “On radical change of nature protection in the country” in which economic instruments were introduced to replace most of the functions of administrative measures (Bogoliubov 1999:76).

rather their constituting enterprises – are excellent examples of the encompassing and multi-functional institutional compounds characteristic of state socialism.

The three main actors in the study, i.e. the environmental committee, the municipality, and the polluting enterprise, were hardly distinguishable prior to the *perestroika* period of the late 1980s. Environmental protection used to be integrated in the activities of the specialised ministries, and local government in single-enterprise towns was, for all practical purposes, a subsidiary of the dominant enterprise. Differentiation has been taking place since the latter half of the 1980s. First, the pulp and paper mill made its way into private hands far from Koriyazhma, geographically speaking. It is no longer a part of the ministerial structure governing the forest industry. Second, local policies are made by local self-government bodies that are not under orders from higher level institutions. Third, decentralised units of central power tried to implement the policies of their respective ministries at the local and regional level.

Assumption on agreements: Non-hierarchical relations between policy actor and target groups are difficult to establish

Voluntary agreements – unilateral or negotiated with the authorities – are typical of the new, “soft” generation of environmental policy tools. Agreements are contingent upon delineation between policy actor and target group, but in addition the instrument is at its strongest when actors relate to each other in a non-hierarchical way. Within the NEPI way of thinking there should not be a strictly hierarchical relation between the authorities and the polluter since internalising environmental concern among all actors, not coercion, is what the NEPI is about. Communication around a problem is needed in order to set up an efficient agreement.

Agreements are working in combination with economic instruments. In Koriyazhma, for instance, the pulp and paper mill sets up agreements with environmental authorities to swap debts resulting from polluting. By inviting the polluter to enter into an agreement on reducing emissions the policy actor makes use of a policy instrument which clearly consists in providing the target group with resources. Fines are converted to environmental measures in the enterprise. The question is whether, and on what terms, the polluter is able and willing to interact on a voluntary basis.

Agreements illustrates Sairinen’s point (2000:20) referred to in chapter 2, that with NEPIs, environmental management is a continuous interaction between groups and forces in society, public

and semi-public organisations, institutions and authorities, private actors and interest groups. The non-hierarchical pattern of interaction between policy actor and target group, which is a basic feature of ecological modernisation, is enabled by features particular to highly developed Western societies. All these aspects of NEPIs make them poorly adaptable to the Russian context, and the assumption is that environmental agreements are unlikely to function well in Russia.

Assumption on environmental programmes: Epistemic community is weak

According to Peter Haas who was referred to in the chapter on theories on NEPIs, epistemic communities, like advocacy coalitions, policy networks and the like, consist of small networks of policy specialists who “congregate to discuss specific issues, set agendas and formulate policy alternatives outside the formal bureaucratic channels, and they also serve as brokers for admitting new ideas into decision-making circles of bureaucrats and elected officials” (Haas 1992).

The process of setting up the environmental programme brings together various actors. The programme is related to the economic instruments and the instrument of setting up agreements because the programme, among others, includes the environmental measures resulting from the agreements. Environmental programmes conform to ecological modernisation by being an arena for non-hierarchical communication. Besides, it is a potential vehicle for the development of a common environmental concern involving policy actor, target groups and the public alike, as described by Hajer (1995). To what extent are the actors able to do as Stark and Bruszt (1998) recommend, i.e. co-operate across the dividing line between state and civil society, a dividing line which is particularly strongly felt in former state socialist countries?

The internalisation of pragmatic environmentalism is a hallmark of ecological modernisation. In highly developed Western societies such tendencies have been observed and form an important element in ecological modernisation (Hajer 1995). It is assumed here that such tendencies are unlikely to play a role for the time being in a context of former state socialism.

Authorities and polluters do not see environmental problems as systemic. Environmental groups are fundamentalist, or at least not in dialogue with authorities. Post-Soviet industry has rejected to integrate environmental concern. In other words, one must expect environmental programmes to have little prospects.

Summing up

From what has been said in this sub-chapter neither economic instruments, agreements nor environmental programmes are likely to be easily introduced in Russian industrial towns. In fact, basic characteristics of NEPIs are strikingly out of step with the Russian context, as the Russian context is envisaged based on the assumption of path dependency. In short, one may expect NEPIs to be weakly adaptable in Russia simply because basic preconditions of eco-modernism is absent.

It remains, however, to see how NEPIs function in specific Russian contexts. Koriashma, a single-enterprise town in Northwest Russia will serve as site for this case study.

7.2 Some reference to method

Chapter 5 on methods showed several ways case studies are being carried out as well as several aims of using them. Nonetheless all case study strategies have in common a need and a wish to see the studied phenomenon in relation to its environs.

Case studies are suited for the purposes of this thesis. Case studies enable a careful analysis of *how* instruments interact with the surroundings. Furthermore, as argued above, as a result of their focus on the phenomenon's complex interrelatedness, with the context case studies make it possible to go into the question of *why* instruments are rejected, or alternatively adopted, when they meet "real life". This chapter and the subsequent chapter on Preiļi (Latvia) draw on Charles C. Ragin, who holds the logic of cases to be configurational, i.e. consisting of parts that must be understood in relation to each other. Just to repeat from chapter 5.3.2, these parts may be "institutions, path dependencies, social structures, historical patterns and trends, routine practices, singular events, event sequences, connections to other cases, the case's larger environment, and so on" (Ragin 2000: 68).

In the two chapters a keen eye will be kept on the importance of the parts that the logic of case consists of. To make this more practicable, we will follow up what we suggested in chapter 5.7, i.e. to make an analytical distinction between the *phenomenon* of study (the new environmental policy instruments), the *site* in which we study them (the single-enterprise towns of Koriashma and Preiļi), which together constitute the *cases*. The case must be seen in its *context*, which

denotes the wider cultural, social, economic and social surrounding, that of Russia today with all its novelties and path dependencies.

7.3 The site: A single-enterprise town

Single-enterprise towns are found in most industrialised countries. The countries that emerged from the former Soviet Union all have single-enterprise towns characterised by the distinctive features of state socialist industrial society. Soviet planned industrialisation was marked by a voluntarism that enabled the establishment of totally new enterprises in almost virgin locations, although generally in the vicinity of raw materials.

7.3.1 The single-enterprise town in Russia

One distinctive feature of state socialist local politics was the important role played by large enterprises. The Czech sociologist, Michal Illner, puts it like this:

"As elements of hierarchical, centrally administered organisational structures, enterprises acted in their territories as pioneers of modernisation as well as representatives of central power. Usually, they were economically the strongest and politically the most reliable institutions in their respective municipalities, and their resources were the most readily available for various community-oriented purposes" (Illner 1992:40).

Towns grew up around these industrial enterprises, and might even be said to have grown up *within* the enterprises.

Altogether, there are 75 single-enterprise towns in Russia with more than 10 000 inhabitants and 138 single-enterprise towns with fewer than 10 000 inhabitants.¹⁶ To be classified as a single-enterprise town or, as the Russian expression goes: "*a municipality with a town-constituting enterprise*", more than 30 per cent of the town's workforce must be employed by one enterprise (Iyer 1997). In addition, at least 30 per cent of the engineering, transport and social infrastructure must be in the hands of the enterprise, and no less than 50 per cent of municipal budget revenues must come from the dominant enterprise (Dregalo & Ul'ianovskii 1999: 66 – 67).

¹⁶ See: Trudovaia Koriashma, 26 III 1998, "Status gradoobrazuiushchego eshchë nado zaslužhit"

Under state socialism single-enterprise towns constituted an extreme version of that system in the sense that the state socialism's emphasis on production left the cornerstone enterprise practically unchecked, perhaps even more so than its equivalents in capitalist societies. Furthermore, the tendency under state socialism was to govern not as the doctrine prescribed, directly through the Party, but through industrial constellations which further strengthened the position of the enterprise in question. Decisions were made as a result of striking a balance between specialised ministries and central planners, a system described as and termed "centralised pluralism" by Alec Nove in 'The Soviet Economic System' (Nove, 1977).

Paternalism seems to go hand-in-hand with single-enterprise towns everywhere, and socialist states were no exception to this rule. Compared with rural dwellers and the inhabitants of similar-sized towns, the inhabitants of Soviet single-enterprise towns were usually well off. This holds true both for their wage level and general living conditions. This is because the enterprise provided inhabitants with welfare benefits such as flats, kindergartens, cinemas, sports clubs, and holiday centres of high quality (Illner 1992; Shomina 1992; Jacobsen 1999). Still, living conditions are generally better in Russian single-enterprise towns than in other types of towns.

In single-enterprise towns no strict limits were drawn between the enterprises and the town, between the directors and the municipal authorities. The enterprises took care of services, which in other European countries have been regarded as public (state, municipal). This applies to the social sphere, e.g. holiday facilities, health centres, kindergartens and housing. Culture and sport were also under the auspices of the enterprises, which ran the cultural centre, various cultural clubs, libraries, the swimming pool, sports centre and sports clubs. Infrastructure, such as boilers, water supply, sewage and wastewater treatment, covered not only the enterprises but the towns as well, and was run by the enterprises. All in all, the cornerstone enterprise was a major decision-maker, within the confines of the state socialist system when it came to economic, social, cultural and environmental issues.

With the dismantling of state socialism, new roles emerged. Earlier, decision-making used to be handled by party officials, specialised ministries, and enterprise directors and, to a certain extent, local government. Now, decision-makers include owners, enterprise directors, the central government and, to a limited extent, local self-government. Role expectations have changed. Modern environmental protection strategies expect enterprises and different branches of the

public government and self-government to play a role. In fact, new environmental policy instruments *are based on* the idea that environmental management involves continuous interaction between groups and forces in society, public and semi-public organisations, institutions and authorities, private actors and special interest groups.

Koriazhma is a good example of a general pattern valid all over the former Soviet Union. An all-out division of labour, or differentiation of functions, is taking place between various institutions. Being in charge of infrastructure for heating flats, the pulp and paper mill is interested in selling infrastructure services as a part of its commercial profile (Polovnikova 2000). This is a seemingly paradoxical situation in which the state socialist legacy (the enterprise that controls “municipal” infrastructure) enables thrusts for comprehensive privatisation and the “marginalisation” of the municipal sphere.

We have chosen to analyse environmental actors and institutions and their interactions by making a case study in a single-enterprise town. This type of community clearly illustrates the problems facing former socialist states. Single-enterprise towns provide researchers with abundant material for understanding how state socialism used to work. Keywords to describe a single-enterprise town are: Preference for production, organisation of the state apparatus by industry, paternalism instead of welfare, de-politicised politics combined with a politicised economy and, not least, the prevalence of multi-functional institutions.

Consequently, single-enterprise towns also help researchers study processes that characterise the *dismantling* of state socialism. Going from state socialism to a market-oriented system requires a more clear-cut division of labour between the institutions responsible for production on the one hand, and for regulation and policy-making in general on the other. These processes are more clearly observable in single-enterprise towns than in towns with a more plural range of actors. Therefore the single-enterprise town is very suitable as a *site* in which to observe the phenomenon of study as it unfolds itself.

7.3.2 The site – a pulp and paper town

The settlement evolved from scratch in the early 1960s. It is located 40 kilometres east of Kotlas (population today 68 700), a major railway junction (Kotlas-Moscow, Kotlas-St. Petersburg, Kotlas-Vorkuta, Kotlas-Syktyvkar, Kotlas-Viatka, Kotlas-Arkhangelsk). The town was built by the Komsomol (the Young Communist League) as a so-called Komsomol construction, *komsomols'skaia stroika*.

The first chemical pulp (sulphur cellulose) was produced in 1961, followed by viscose pulp, which required special treatment of water. In 1964 the plant produced its first paper, followed by carton in 1966. The first station for cleaning water by biological means was inaugurated in 1965. At the beginning of 1967, the plant produced the first wood pulp sheets. In 1972 Koriashma began making printing paper, and two years later bleached cellulose was introduced into the plant's range of products.

When Koriashma was founded in 1961, it had the status of "industrial settlement" (*rabochii posëlok*), gaining town status only in 1985. Unlike the Arkhangelsk region as a whole, which is experiencing a net reduction in population, Koriashma has been able to maintain a population of about 44 000. Other towns in the Arkhangelsk region tend to lose between three and five per cent of their population per year.

The population of Koriashma (in thousands)

1995	44.1
1996	44.3
1997	44.3
1998	44.4
1999	44.3
2000	44.2

Sources: <http://www.msa.ru:80/statistics/demograf> and Arkhangel'skii oblastnoi komitet statistiki 2000)

The 1997 figures show that 64.8 percent of Koriashma's working population were employed in manufacturing, 6.8 percent were working in the building industry, 6.7 percent were employed in health-care and education and 4.8 percent in municipal infrastructure.

For Koriashma, the fact that the town was based on the forest industry gave it high status in Soviet policy-making. Wood was increasingly used to make products as the 20th century progressed. Wood has traditionally been an important source of foreign currency for the Soviet Union. A fully-fledged forest-industrial complex developed, consisting of lodgings, sawmills, wood processing facilities, pulp and paper mills and wood chemical plants. The period from 1960 to the 1980s was the golden age of the forest-industrial complex (Lukin 2001:216). It was also the period when Koriashma developed.

One prime indicator of the high standards found in single-enterprise towns is the standard of basic everyday facilities. Water supply into the flats, sewage, waste disposal systems and heating were available to practically all the inhabitants of single-enterprise towns (Arkhangel'skii oblastnoi komitet statistiki 1999:57). As illustrated in the table below, the technical standard of local infrastructure tends to be higher when it is owned by the dominant enterprise rather than by the municipality.

Table 7.1 *Percentage of water pipes not complying with sanitary norms and rules (Arkhangelsk oblast):*

Water pipes	1994	1995	1996	1997	1998	1999	2000
Municipal	53.3	52.0	48.9	43.2	43.8	44.1	39.6
Enterprise-owned	38.1	36.7	31.5	31.8	30.5	28.2	27.6

(Source: Tsentr 1997:14 and Tsentr 2001:14)

Although the enterprise-owned water pipes are better, the water in them appears to be of largely the same quality as the water flowing through the municipal pipes (table below).

Table 7.2 *Percentage of water tested in 1996 and not complying with sanitary requirements (Arkhangelsk oblast):*

	According to sanitary-chemical indicators	According to micro-biological indicators
Municipal water pipes	61.0	15.2
Enterprise water pipes	60.0	18.0

(Source: Tsentr 1997:14)

7.4 The main environmental actors in Koriashma

Here, the main actors will be presented with the aim of identifying their capacities in dealing with the new environmental policy instruments formally as well as informally. Are they differentiated enough to be defined as policy actors and target groups? And, are they likely to be able to make use of and respond to the indirect mechanisms NEPIs consist of and the non-hierarchical pattern of

relationship that they are based upon? In order to reach an answer to these questions, the actors must be “placed in their site” for analysis.

Three main environmental actors can be identified in our site (Koriazhma): local state bodies (the environmental committee), local autonomous authorities (town authorities), and economic enterprises (the polluter is a huge pulp and paper mill in our site town).

In this context, the environmental committee is a policy actor, and the pulp and paper mill a target group. Local self-government is both. All three actors have institutionalised environmental concerns. The state has its environmental expertise located in the Nature Resource and Environmental Protection Committee at regional (*oblast*) level, with inspectors working at local level. The municipality has set up its own environmental department. There is an environmental department at the pulp and paper mill. These three environmental actors, under auspices of the state, the municipality and the enterprise, respectively, will be treated below.

The institutional underpinnings of environmental efforts are not solely dependent on the environmental actors emphasised in this study (the environmental committee, the municipality and the enterprise). Several organs of public administration are assigned a role in environmental protection, and are prone to support the environment when confronted with other interests. The environmental committee and the municipality serve a co-ordinating function. In the period covered by this study, the following bodies played a role (although reorganisation made changes occur):

- Agency for Hydrometeorology and Environmental Monitoring
- Sanitary-Epidemiological Supervision
- Mining and Industrial Inspection
- Fishery Committee
- Water Management Committee
- Committee for Land Resources and Land Use
- Committee for Geology and Use of Mineral Resources
- Agency for Geodesy and Cartography
- Forestry Agency

The Agency for Hydrometeorology and Environmental Monitoring (*Gidromet*), which has the task of assessing environmental quality and pollution levels, analyses trends and makes forecasts. The data used is partly *Gidromet*'s own, partly data from the sanitary-epidemiological

supervising offices and partly from polluting enterprises' own laboratories.

In former state socialist countries, medical and epidemiological institutions are generally important environmental actors since they focus on detrimental effects on *human beings*. They often play a pivotal role in trying to secure a clean and healthy environment for local inhabitants. The State Sanitary-Epidemiological Supervision (*Gossanèpidnadzor*) must be mentioned as a major actor in environmental matters in Russia. The Moscow-based Institute of Hygiene is another institution under the Ministry of Health that plays an important role in environmental matters. The institute stipulates the maximum permissible levels, abbreviated PDK, of payment for using nature.

Since 1993, the oblast-level offices of the Gossanèpidnadzor have issued regional health reports.¹⁷ These reports contain a surfeit of information on the environmental situation in towns and cities, much of which is directly related to the everyday problems of their inhabitants.¹⁸

The Gossanèpidnadzor is responsible for the so-called socio-hygienic aspects of the town environmental programme. The Gossanèpidnadzor is entitled to levy fines for violations of regulations related to working conditions and hygiene. The money goes into the town's social welfare fund. Furthermore, the Supervision monitors the environment. In and around Koriazhma, there are eight monitoring points under the auspices of the Supervision (Yudakhin, Davydov and Ivanov 1998:9). It is worth noting that the local environmental committee (until 2000, a field office of the central environmental authority *Goskomèkologiya*) monitors emissions into water, as does the environmental committee of the pulp and paper mill.

¹⁷ Interview with the head of the Koriazhma Gossanèpidnadzor, 28 May 1998.

¹⁸ Tsentr gosudarstvennogo sanitarno-èpidemiologicheskogo nadzora v Arkhangel'skoi oblasti (1997): Regional'nyi doklad o sanitarno-èpidemiologicheskoi obstanovke v Arkhangel'skoi oblasti v 1996 godu, Arkhangel'sk

7.5 The environmental committee

7.5.1 The environmental committee in Koriazhma

Koriazhma's environmental committee has taken the need to differentiate itself from other actors seriously. The committee has emphasised its role as representative of the state, which its director explains by citing the need to insulate the committee from the dominant pulp and paper mill. In the light of this, need for co-operation was addressed. The environmental committee has entered into close co-operation with the local community, and not least with the polluting enterprise.

Until 1998, the environmental committee was the main environmental policy actor in Koriazhma, and it was a respected one. The Koriazhma environmental committee gained a reputation oblast-wide throughout the 1990s for being efficient. Its head was held to be strong and devoted to “the cause”. She made use of the committee’s status as a decentralised unit of the federal environmental authorities, i.e. of state power.

In fact, the Koriazhma environmental committee was abolished as early as in 1998. The committee was actually abolished prior to the 17 May 2000 decree due to the rule that the scope of the activities of federal units at local level was restricted to strictly federal problems. This made it financially unfeasible to maintain environmental committees at the local level, even in a highly polluting town like Koriazhma. In other words, the dissolution of the state organ responsible for environmental protection took place in the “site” two years before it happened in the wider context.

Having field offices of federal-level authorities was considered useful in single-enterprise towns since in most cases, e.g. the town in the present study, where the dominant enterprise was of federal importance and no entity without proper, federal-level backing would dare to say anything against it. As it was pointed out, when controllers live under the walls of the enterprise (*“pod stenami kombinata”*) problems of independence are obvious. So, in order to be independent of local power structures, practically all of which evolved around the dominant enterprise, environmental officers need to be attached to power structures higher than the local level. Large polluting enterprises exercise more caution in dealing with federal institutions than with those at local level which, for a variety of practical intents and purposes, are dependent upon the same enterprises.

There was one site-specific feature that played a role in Koriashma: The local environmental committee stressed its status as a state unit strongly and explicitly. So it did much more than for instance its homologue in the otherwise very similar Novodvinsk, another single-enterprise town built around a pulp and paper mill. Insulation from the surrounding community was held to be useful, although it may be asked whether the practices of the committee were commensurate with that idea.

Five people used to be employed by the environmental committee, which also covered the activities of the local Eco-fund (the committee head also served as executive director of that fund). Two of the five employees were state inspectors, one was an accountant for the Eco-fund and one was technical staff. There used to be more employees when they had their own laboratory. However, in the mid-1990s these services were transferred to the PU ZhKKh, the enterprise for municipal services.

The environmental committee was well prepared to deal with enterprises, as its employees were mainly technologists. In fact, environmental committee officers in single-enterprise towns were frequently recruited from the technological departments of the enterprise. This was the case for the head of the environmental committee in the present case town. The environmental committee used to work with the Department of Environmental Protection at the pulp and paper mill, as well as with the chief engineers and directors. The close relations between the local technologists, all of whom were or had been employed by the pulp and paper mill, may have pierced through some institutional insulation between the committee and the enterprise, which would otherwise have been ensured by the committee being a state unit.

How is the sector of environmental protection represented after the abolition of the environmental committee at local level, and the merger of the sectors of environmental protection and nature resource use?

Environmental authorities remain at oblast level, with inspectors at local level. The Oblast Committee for Environmental Protection and Natural Resource Use represents the state in environmental matters vis-à-vis the big polluter in Koriashma. Therefore, the fact that the local environmental committee was abolished did not necessarily mean that the environmental authorities lost independence vis-à-vis the pulp and paper mill. Oblast-level environmental authorities played a significant role at local level earlier as well. What worries several

Russian environmentalists now, is the fact that the environmental authorities were merged with the natural resource use authorities.

In Koriyazhma, the well-respected head of the committee still works as chief inspector, but now in the framework of a committee covering all seven municipalities in the Kotlas region. The committee is under the Regional Committee of Natural Resource Use and Environmental Protection, meaning it is still federal. It has a staff consisting of eight employees, i.e. one head and one inspector per municipality.

The rest of the former staff of the local committee still works with environmental issues. This applied to four people – the previous head of the environmental committee, who still has her office in Koriyazhma, one municipal employee responsible for the environment and two employees of the regional environmental fund. Ironically, they all have offices in the same wing of the town hall where they used to be when they were all working for the environmental committee. "We are like five fingers, whereas we ought to be a clenched fist", said the former head of the environmental committee.¹⁹

The Act related to Environmental Protection (1991) equips the regional committee with a set of instruments that enables them to play different types of roles locally, all of which are aimed at promoting environmental interests. The chapter below (on the use of NEPIs) will show how the committee shifts between its roles as controller (with legal powers), source of funding (through the Eco-fund), and source of inspiration (e.g. through the town environmental programme).

7.6 The main polluter

7.6.1 Restructuring the industry

The prevailing view among policy-makers in East Central Europe and the former Soviet Union and international institutions giving them advice, was that private owners were better than the state in undertaking restructuring. Privatisation was carried out very fast in Russia justified with the argument that this was the most efficient way to overcome resistance (Åslund 2001). As outlined in chapter 4, the

¹⁹ Interview with (former) head of the Environmental Committee in Koriyazhma 7 December 2001. (Also interviewed 22 October 1997 and 28 May 1998).

opposite view is also represented. According to this view hasty privatisation might have resulted in a strengthening of old patterns since the contextual situation offered little to build a privately owned industrial sector on at the outset (Amsden, Kochanowicz and Taylor 1994; Burawoy 1995, 1996; Stark and Bruszt 1998). This is a discussion on the relation between the subject of policy transfer (here: the policy of privatising state-owned enterprises) and the setting into which it was imposed (i.e. a situation with no pre-existing legal, private ownership and the institutions to underpin it). Although theoretically parallel to the discussion on NEPIs and the post-socialist setting, the parallels will not be drawn further here. In stead the consequences of privatisation on Kotlas pulp and paper mill's character as an environmental actor will be identified.

Big Soviet enterprises were multi-purpose actors. They were to fulfil the economic plans, follow up policy guidelines set by the Party, and take care of a wide range of needs among their employees. Especially in single-enterprise towns where there was no other alternative sponsor of housing estates, swimming pools, culture houses, and even communal infrastructure, the dominant enterprise took on all these tasks. This made it "town-constituting". Today, the enterprises' main task is to be profitable within the limits set by law, and social services are left to the local self-government, voluntary organisations (like NGOs) and private service deliverers.

There are other factors, external to the NEPIs, which may bring Russian enterprises closer to the practices of ecological modernisation. These stem from the easier access to the most advanced technologies, which as a rule are friendlier to the environment than the older ones. Furthermore, Russian products sold abroad meet the requirements of purchasers, consumers and authorities that they should be ecologically clean. These requirements are often, so far, put more strongly abroad than in Russia. A case in point is the requirement that pulp is not bleached with chlorine.

7.6.2 The pulp and paper mill in Koriyazhma

The regional importance of the forest-industrial complex

Forestry and industries related to it, is the single one dominating industry in the Arkhangelsk region (Lukin 2001; Yudakhin, Davydov, Ivanov and Holm-Hansen 2002). Kotlas pulp and paper mill (Kotlasskii tselulozno-bumazhnyi kombinat: KTzBK) located in Koriyazhma, is one of Europe's biggest enterprises of its kind. Basing

itself on nature resource use its profile conforms well to the federal strategies for economic development of Russia.

Table 7.3 *The forest-industrial complex' share of total industrial production in the Arkhangelsk region (in per cent):*

1995	53.4
1996	35.7
1997	38.9
1998	42.7
1999	52.7

(Source: Arkhangel'skii oblastnoi komitet statistiki 2000)

Table 7.4 *Share of the workforce in the Arkhangelsk region employed in the forest-industrial complex (in percent):*

1995	44.4
1996	42.7
1997	43.1
1998	45.3
1999	47.8

(Source: Arkhangel'skii oblastnoi komitet statistiki 2000)

The figures above indicate that about half the industrial output and half the workforce living in the region of Arkhangelsk are affiliated with forestry, forest processing or pulp and paper production. The all-Russian average is less than ten per cent (Arkhangelsk Region Committee of State Statistics 1996:25).

The Kotlas Pulp and Paper Mill in Koriyazhma and the pulp and paper mills in Arkhangelsk town and Novodvinsk therefore form cornerstone industries in the Arkhangelsk region. Novodvinsk and Koriyazhma are typical single-enterprise towns with enterprises of Union-level significance during the Soviet period, and federal significance after. This means both these towns used to be directly subordinate to a central ministry – in this case, the Ministry of Forest Industry.

Kotlas pulp and paper mill in transition

Kotlas pulp and paper mill is the obvious “target group” for any environmental policy-maker. As a result of privatisation the enterprise is no longer directly subordinated to the state (through the industrial branch ministry).

Throughout the 1990s the pulp and paper mill had the giant Ilim Pulp Enterprise – the world’s 11th largest pulp company – as the main stakeholder.²⁰ Decisions used to be made as a result of political processes going on between the central planning authorities and the branch ministry for forest industry, with the directors of Kotlas pulp and paper mill as active participants representing the interests of their enterprise and Koriashma. Today, these decisions are made by the shareholders, i.e. Ilim Pulp Enterprise.

It is popularly held in Koriashma that this has made the future insecure for the inhabitants. The majority of shareholders do not have any relation to Koriashma, and the directors are afraid of standing up for local interests since they may easily be fired. The fact that Ilim Pulp Enterprise bought shares that had been given to employees as a part of the privatisation process is, in retrospect, seen as a rip-off by local inhabitants.²¹

The enterprise's position in town

The Kotlas Pulp and Paper Mill (KTsBK) is the dominant enterprise in Koriashma. Forestry, forest processing and pulp and paper production constitute no less than 96 and 97 per cent of the town’s total production (labour, services) in 1996 and 1997 (Archangelsk Region Committee of State Statistics 1999:53-54).

The major part of the working population works for the Kotlas Pulp and Paper Mill. In terms of taxes, Koriashma has always been a net contributor to the Arkhangelsk region and the town budget of Koriashma.

The town’s technical infrastructure and cultural infrastructure are still to a large extent in the purview of Kotlas Pulp and Paper Mill. In Koriashma, the water intake is run by the mill, as is the case in similar towns all over Russia. Municipal wastewater is cleaned at the mill’s

²⁰ In 2002 Ilim Pulp was outmanoeuvred as an owner of Kotlas pulp and paper mill by an investment group called Base Element. The conflict casts light on contemporary business life in Russia. For instance, the rival groups for ownership, Ilim Pulp and Base Element – signed an agreement brokered by the governor of Arkhangelsk that they refrain from using violence when confronting each other. Nonetheless, the issue will not be dealt with here since the study covers the situation 1997–2001.

²¹ During fieldwork in Koriashma local interlocutors frequently aired such views. For a presentation of the relationship between owners and local population in Koriashma (with a great deal of understanding for Ilim Pulp Enterprise) see: *Èkspert Severo-Zapad* 13 (20), 14 VIII 2000, "Koriashma, neponiatnaia – ili neponiataia?"

wastewater treatment plant. The pulp and paper mill sells water and buys wastewater. The pulp and paper mill sells drinking water like “any energy resource” to the municipal enterprise for public services (*zhilkomkhoz*) which “re-sells” wastewater to the general public.

The town authorities do not dispose of a boiler. Energy resources are provided by the Kotlas Pulp and Paper Mill. There is a big power station which was privatised at the same time as the enterprise. Household gas (for gas stoves) is not part of the pulp and paper mill’s provision of “infrastructure”.

Health and cultural facilities are also controlled by the pulp and paper mill. At the start of this study in 1997, there were two health and holiday centres (*profilaktoriia/sanatoriia*), one of them – *Zar’ia* – owned by the Kotlas Pulp and Paper Mill. There were fears that the pulp and paper mill would dispose of its holiday centre, but in summer 2001, the local newspaper reported that the health and holiday centre would be refurbished.

Likewise, there were two cultural centres, one of them municipal, one under the pulp and paper mill. The latter was considered best and most popular. In 1997 the enterprise announced that it would no longer finance the centre, a decision that was not well received in the town hall. The Kotlas Pulp and Paper Mill library had been very popular due to its technical journals and books. There was also one vocational school that prepared students for work in the mill.

Sports facilities are mostly operated by the pulp and paper mill. This holds true for “Olimp”, the town’s palace of sport, which includes a swimming pool, and the “Stadion TsBK”.

The pulp and paper mill used to be the main owner of flats in town, but during the 1990s flats were transferred from the enterprise to the municipality. Some of the flats have been bought by the inhabitants, and they have established Associations of Homeowners (*samovladel’tsy*). Today, there are about 15 such associations.

Kotlas pulp and paper mill as a polluter (target group)

In the mid-1990s, the pulp and paper mill produced approximately 940 000 metric tonnes of cellulose, 245 000 metric tonnes of paper and 250 000 metric tonnes of carton. In 2000, the figures were: 840 000 metric tonnes of cellulose; 180 000 metric tonnes of paper and 175 000 metric tonnes of carton²².

²² See: *Lesnye Novosti*, 20 October 2001, No. 14 (24).

The Kotlas Pulp and Paper Mill (KTsBK) is a large-scale polluter primarily because its core activity requires the use of huge amounts of water that are released into the river and because large amounts of methyl mercaptan, with its characteristic smell, are released into the air. It is a priority task to reduce emissions of nitrogen dioxide, sulphur dioxide, dust and methyl mercaptan.

Table 7.5 *Emissions of methyl mercaptan into the air (by how many times the PDK is transgressed by one discreet, maximal occurrence) in three single-enterprise towns*

	Koriazhma	Novodvinsk	Arkhangelsk
December 1996	16	9	7
December 1997	19	12	4
December 1998	22	6	8

Table 7.6 *Average concentration of substances in Koriazhma exceeding PDK (1 = PDK)*

	Metyl mercaptan	Nitrogen dioxide	Ligno-sulphonate	Oil products
1997				1,0
1998	16,0		3,0	5,0
1999			1,3	
2000	1,3	1,4	2,3	

(Sources: Gosudarstvennyi komitet 1999; Komitet 2001)

The enterprise is a major polluter first of all because of its primary production – pulp and paper, but in addition, the mill pollutes due to the fact that large parts of the town infrastructure are in its hands, e.g. the wastewater treatment plant, the water intake and the power station. The pulp and paper mill sells drinking water to the municipality or, more precisely, to the municipal enterprise for housing and housing service (PU ZhKKh). As for wastewater, the PU ZhKKh “re-sells” it from the citizens at tariffs set by the mayor. The price between the pulp and paper mill and the town is based on an agreement. It is however, the emissions from industrial production that create pollution. Figures on regional level indicate that 56,8 percent of the total pollution is attributed to industrial production whereas a mere nine percent is due to municipal services (zhilishchno-kommunal'noe khoziaistvo) (Gosudarstvennyi komitet 1999:43)

The enterprise as a local environmental actor (the environmental section in the enterprise)

The pulp and paper mill has set up a *Department for Environmental Protection* – an ecological service unit – to make sure the enterprise complies with the provisions of the Act related to Nature Protection from 1991. A similar ecological service also existed prior to enactment of this law. The department controls the enterprise's production process with regard to the environment. More than 20 people work in the department, mostly trained specialists. In addition, the enterprise has a Station for Biological Cleaning of Wastewater. All wastewater moves through this station. Among other things, the department checks the water at six different points.

The main tasks of the Department for Environmental Protection are to:

- control the technical process (maps showing the technological procedures have to be displayed at the workplace)
- control the wastewater treatment facilities, checking their effectiveness
- control industrial emissions into the atmosphere, sewage emissions into reservoirs and permitted industrial emissions and waste disposal
- engage in inventories of the enterprise (*inventarizatsiia*) to identify the sources of environmental pollution: air, water and soil
- develop standards for maximum permitted concentrations (PDK) in accordance with the town environmental committee (standards are confirmed by the regional level environmental committee)
- develop plans for measures to reduce adverse impacts on nature
- make reports for the bodies that control wastewater treatment facilities, industrial emissions and the disposal of harmful substances
- analyse the sanitary conditions at the workplace and the surrounding area
- control the use and protection of natural resources (Marieva 1999)

The practice of making environmental inventories (*inventarizatsiia*) is compulsory and aims at providing information on which to build environmental strategies and, not least, to set the maximum permissible emissions. The enterprises perform their own inventories based on instructions issued by the environmental authorities (environmental committee). The process aims at identifying the

amounts of raw materials that have been used and the amount of pollutants emitted (Marieva 2000).

Despite its status as “internal controller” by being a part of the polluting enterprise, it is a target group. Likewise, despite having more or less the same educational background, often even having been colleagues in the enterprise, the people in the environmental department of the enterprise complain that the external control unit creates problems. It should be noted that the people in the ecological service unit within the enterprise are not major decision-makers. Nevertheless, in many ways, the ecological service unit in the enterprise is an integral part of a wider environmental sector in Russian society. The employees belong to the sector in the sense that they relate to environmental regulations, use an environmental vocabulary and make the same type of analysis as the external controllers.

The pulp and paper mill’s achievements in environmental protection

In the latter half of the 1990’s the enterprise improved its environmental performance considerably by modernising its facilities. As an owner Ilim Pulp Enterprise has invested in environment, more so than the owners of the pulp and paper mill in Novodvinsk²³. A milestone was reached in 2000 when bleaching no longer was made using elementary chlorine. This has reduced the chlorinated compounds in the effluents from the mill. The technological switch to non-chlorine bleaching, however, was already planned in the mid-1980’s, but halted by the economic downturn following the dissolution of the Soviet system. In fact, the vice-director responsible for technological development of the mill took part in the planning both in the mid-1980s and the late 1990’s²⁴. In Russia itself, non-chlorine bleaching is not mandatory, but internationally regulations are strict, and Ilim Pulp Enterprise directs itself to the Central European market where EU regulations were applied also in the decade prior to the enlargement.

²³ See: Ėkspert Severo-Zapad 13 (20), 14 August 2000, ”Koriazhma, neponiatnaia – ili neponiataia?”

²⁴ See: Trudovaia Koriazhma, 28 October 1999, “ECF – bumaga bez khlora”.

7.7 The local self-government

7.7.1 Development of local self-government in Russia

Developing local self-government formed a part of the efforts to democratise Russia in the late 1980's. Local councils – from March 1990 elected democratically – were to take over some of the responsibilities that used to belong to the Communist Party. Elected councils were given the power to instruct the executive, administrative organs of the municipality. In June 1991 a Law on municipalities was adopted in the Russian federal republic of the Soviet Union. The law was radical at the time because it established local self-government's independence from the Party and the state at local level. Decisions of local importance were to be solely in the hands of local self-government. In other words, the law made the state socialist dogma of “the leading role of the Communist Party” and “democratic centralism” null and void. Inherent in the new system there was a potential for conflict between the elected body and the administration, between the mayor and the head of administration.

Prior to the adoption of a new Law on “General Principles of local self-government in the Russian Federation” 12 August 1995, a debate went between proponents of a parliamentary versus a presidential model. The parliamentary model envisaged strong local self-governments like in the Gorbachëvian law from 1991. The presidential model entailed municipalities tightly controlled by the regional governors (state power). At the end of the day, the 1995 law came closer to the parliamentary model than the presidential one. The distinction between self-governmental power and state power at local level was clearly made. Nevertheless, today just like in most Western countries, local decision-making in Russia is very much formed by policies made at higher levels. According to the scholar Vsevolod I. Vasil'ev (1999) 80-90 pct of the decisions made by local self-government just reproduce laws of the federation or federation subject. Only ten to 20 pct of the decisions are “regulated” by social conditions within the municipality.

In Russia, local self-governments set up their own statutes, often referred to as “local constitutions”. Through the statutes it is up to the actual local self-government itself to decide in the highly symbolical question of what to call the local council – *duma*, assembly (*assambley*), assembly (*sobranie*), or council (which is rendered as

sovet in Russian). Of more importance is the fact that local statutes establish the way the local head of administration is elected – by direct vote or by the local council – which defines his position vis-à-vis the mayor. Often the two positions of head of administration and mayor is combined by one person.²⁵ As argued in one reader on Russian local self-government, this model is identical to the one introduced by a reform as early as 1870 (Animitsa and Tertyshnyi 2000:142). Hierarchical structures with one, strong leader – *khoziain* – is secured by combining the post of head of administration with that of mayor.

Local self-government was introduced in Russia despite the tug of war between legislative and executive institutions in the first half of the 1990's. Today local councils have been elected and established all over Russia. The relative strength of local self-government institutions varies from town to town, but in general the administration seems to have the upper hand over the elected councillors (Dement'ev 2001:109).

7.7.2 Local self-government in single-enterprise towns

In single-enterprise towns, local self-government is under the influence of the dominant enterprise. On the other hand, the enterprise assists local authorities in defending local interests at the central, federal level, not least in Koriashma where the pulp and paper mill is of “federal significance”. One vice-mayor remarked: "It is useful that the enterprise leaders are strong. They are of great help when making agreements with Gazprom, with the railways and in affairs at the federal level."²⁶

The fact that leading positions in the enterprise appear to qualify for leading positions in the town facilitates communication. The mayor, for instance, has had a long career in a leading position in the pulp and paper mill before he became elected. However, this exchange of leaders may impede the differentiation of functions usually considered a prerequisite for a successful transition. This happens when old loyalties and allegiances turn out to be stronger than identification with the current role the cadre is expected to play?

²⁵ On “strong” versus “weak” mayors, see Jacobsen 1998.

²⁶ Interview in Koriashma, October 1997.

7.7.3 Local self-government's role in environmental protection

The municipal sector is organised differently from country to country, so it is no surprise that municipal environmental policy responsibilities vary as well. Nonetheless, in most European countries municipalities are eligible to apply at least one of the following instruments: environmental protection institutions, financial instruments, environmental control and/or land use planning. In other words, municipalities are “policy actors” in one sense or another. In addition, they are “target groups”. In their capacity as owners and managers of large municipal enterprises responsible for infrastructure, e.g. wastewater treatment plants, heating stations and landfills, municipalities are among the actors whose actions are supposed to be modified by the new environmental instruments.

It is clear that local self-government institutions are now more clearly defined as a separate actor in local politics than they were in the Soviet period, and environmental protection is one of the most important tasks in the hands of municipal authorities. In fact, local self-government was given more responsibility in this field during the 1990s. Its role in the charge exemption scheme (see chapter 7.8.1 below for more on this) is one example. Furthermore, the abolishment of environmental committees at town level and the municipalisation of its “remnants”, like in Koriazhma, make local self-government even more of an environmental actor.

“Municipality” is a broad concept. In this context, it includes the municipal council, municipal administration and municipal institutions, as well as the enterprises under them. As noted above, the fact that the environmental committees used to belong to the state structure, making them independent of the local powers-that-be was considered a great advantage because they could pressure local polluters. This point of view testifies to a certain lack of confidence in local self-government and its ability to pursue policies based on established principles and longer term goals. Nevertheless, in the Russian system, the municipality is an environmental actor, deriving its authority in the field both from the Law on Environmental Protection (1991) and the Law on Local Self -Government (1995). Section 6 of the latter law lists the policy fields under the jurisdiction of the municipality. Several items on the list refer to environmental issues:

- Land use planning and building

- Land use control
- Regulation of water use and use of minerals for activities of local importance
- The organisation, maintenance and development of municipal energy, gas, heating, water and sewage disposal services
- Heating for the general public and municipal institutions
- The use and processing of household waste
- Participation in environmental protection on municipal territory

In other words, the municipality is a policy actor that supports the environmental committee in its endeavours to pursue environmental policies. But the municipality also has additional functions that make its role dual. As owner and manager of municipal infrastructure, e.g. wastewater treatment plants, heating stations and sewage disposal facilities, the municipality is a major polluter and target group for the environmental authorities. This duality of roles (policy actor and target group) is clearly observable in our case town.

7.7.4 The local self-government of Koriazhma as a policy actor

The environmental department under the local self-government

It was only in the late 1990s that Russian towns of Koriazhma's size established special municipal committees to deal with the environment. In 1998 the issue was discussed twice in the town council of Koriazhma, and a committee was appointed²⁷ ..

The point of view advocated by the mayor of Koriazhma was that the self-government ought to have its own departments on all issues addressed by state bodies, in other words a call for differentiation. Hence, a municipal Department of Environmental Protection under the town administration was established as a parallel to the de-centralised environmental committee in the hands of state authorities. The department is run by one person, a former inspector with the environmental committee. However, the same year the local state environmental committee was abolished. Since then local

²⁷ See, for instance: Trudovaia Koriazhma, 13 January 1998. In the overview of the agenda for the upcoming meeting of the town council, it was stated that one of the vice-mayors responsible for local self-government issues was going to speak about the introduction of a Department of Environmental Protection "in the structures of the town administration".

environmental tasks have been divided between the Department of Environmental Protection and the environmental committee at a higher, i.e. regional, level. Two years later all decentralised environmental state bodies at town level in Russia were abolished formally (the 17 May 2000 presidential decree).

The Municipal Department of Environmental Protection is accountable to the mayor, vice-mayor and chairman of the Committee on Municipal Property. Its activities are guided by decisions made by the regional assembly and the town дума. The department is to work with the environmental committee within a unitary system of environmental protection at the local level. The department is in charge of co-ordinating the environmental activities of enterprises in the town (the main instrument here is the environmental programme). It makes decisions on the need for ecological expertise in respect of planned construction or reconstruction projects. The department also prepares resolutions to be made by the town council ("*duma*") in the sphere of environmental protection. As mentioned above, in 1998 the local self-government was assigned an important role in the scheme for environmental charge exemptions for the pulp and paper mill.

There was a risk of duplicating the activities of the environmental committee. For instance, like the environmental committee, the Department of Environmental Protection co-ordinates the activities of the environmental services of the enterprises in town, irrespective of their form of ownership. Furthermore, the Department is entitled to check the environmental performance of all the enterprises in town and it licenses certain types of nature use, including emissions of harmful substances.²⁸

Local self-government as a policy actor – An example

In late 1999, the town administration initiated several measures to prevent mercury pollution.²⁹ This may illustrate how the Department of Environmental Protection works. With two laws in hand, i.e. the Environmental Protection Act and the Act related to Waste from

²⁸ Decree on the department for environmental protection of Koriashma town administration, in Russian: Polozhenie ob otdel'noy okhrany okruzhaiushchei sredy administratsii goroda Koriashmy (21 December 1998).

²⁹ (Municipal) decree on the prevention of pollution from metallic mercury (Rasporiazhenie o predotvrashchenii zagriazneniia okruzhaiushchei sredy metallicheskoi rtut'iu" (15 December 1999).

Production and Consumption, the Department set out to get rid of the mercury from used luminescent lamps and instruments containing mercury.

Step One: Make an inventory of all items containing mercury (copy of inventory was to be submitted to the Department of Environmental Protection by 20 January 2000).

Step Two: Prohibit the deposit of mercury in the landfill.

Step Three: Recommend punishment for those responsible for the illegal disposal of mercury.

Step Four: Recommend that enterprises ensure mercury be recycled by reliable firms (copy of agreement between enterprise and firm to be submitted to the Department of Environmental Protection by 20 January 2000).

Step Five: Strengthen the municipal enterprise's (PU ZhKKh) control of the material deposited in the landfill and refuse to accept items containing mercury.

Step Six: Step up controls for the collection, use and disposal of items containing mercury. The Sanitary-Epidemiological Centre, the environmental committee and the Department of Environmental Protection are responsible for controls.

The overall control in respect of this action plan (although it is not called that) is the responsibility of the head of the Department of Environmental Protection. In all, 82 enterprises were contacted, but only 28 submitted the required information on time. Large enterprises like the pulp and paper mill, the municipal *zhilkomkhoz* enterprise (PU ZhKKh), the chemical factory and the hospital complied with the decree.

To sum up, local self-government was assigned numerous environmental tasks in the latter half of the 1990s. It is frequently incumbent upon local self-governments in single-enterprise towns to execute the wishes of the dominant enterprise, and environmentalists fear enterprises will exercise more influence on environmental policies.³⁰

³⁰ Such fears were observable among environmental inspectors in Koriashma.

7.7.5 Local self-government as a target group

The municipal enterprises in Koriazhma

Municipal enterprises are responsible for the routine operation of basic infrastructure that has an impact on the environment, e.g. sewage systems, water intakes, wastewater treatment plants, heating (boilers and pipes) and waste disposal. Consequently, municipal enterprises play an important role in implementing environmental strategies in Russian towns. For instance, the modernisation of infrastructure being carried out by municipal enterprises has a strong impact on the environment.

Through its management of municipal enterprises, the municipality of Koriazhma is a target group for the environmental policies pursued by the policy actor. Municipal enterprises are major actors in Russian environmental policies. They control large-scale infrastructure that has considerable impact on the environment.

Municipal services in Russia are defined as:

- Heating
- Supply of cold water
- Supply of hot water
- Sewage
- Waste disposal
- Supply of gas and fuel (for the private sector)

To fulfil these duties, Russian municipalities have their own *zhilkomkhoz* enterprises for housing and the municipal economy.³¹ The *zhilkomkhoz* enterprise in Koriazhma employs a total of 800 people.³² The inventory below lists the different kinds of infrastructure in the hands of the municipal enterprise:

- 220 blocks of flats
- 23.5 km of heating pipelines
- 40 km of water pipes

³¹ In Russian "Proizvodstvennoe upravlenie zhilishchno-kommunal'nogo khoziaistva (PU ZhKKh)

³² See, Kotlaskii Bumazhnik, 17.I.1998, "Tarify i rify zhiteiskikh perekrestkov".

- 63 km of external sewage drains
- 40 km of electrical grids
- 45 km roads
- 466 square metres of parks, lawns, public squares
- Public bath and laundry facilities
- Car and bus parking (90 units)

As in most other European countries over the past decade, municipal enterprises in Russia have been made more independent of the municipality. They are far from fully independent, but the degree of independence granted them is part of a strategy to make them more financially self-sufficient. As a result, they have become more vulnerable to financial instruments such as fines and fees. They are also expected to be more efficient, for example, not to waste energy.

Making the municipal enterprise responsible for heating flats raises a host of environment-related issues. For instance, what sources of energy does the local heating system use: Fuel oil, coal or gas? A lot of energy is lost in Russian towns due to leakage. What technologies are used to transfer the heat?

The questions pertaining to municipal services are not merely technical, but also political. And they are not merely local, but also regional and national. The services provided by municipal enterprises are subject to political discussions, and are of great public concern. In an era of privatisation, housing policies raise several controversial issues. Even heating is a “hot” political topic in the Arkhangelsk region. Not all inhabitants of the region can rest assured that their flats will be warmer than 12 – 15 degrees on cold winter days. The problem of heating flats is related to comprehensive energy supply policies involving different actors representing different sources of energy (gas, fuel oil, coal) and different means of transporting it. The railway lobby would like to see Arkhangelsk use coal and oil, which are transported by train. The building and construction sector would like to build and maintain pipelines for gas.

Having to deal with municipal enterprises that must now try to run on a balanced budget is a new experience for the inhabitants of the towns in the Arkhangelsk oblast. In a situation of severe recession and wage arrears, it is difficult to pay “real prices” for housing, heating, water and sewage services and waste disposal. Besides, these issues are considered political. An article in the Arkhangelsk newspaper “Volna” illustrates this. The author of the article represents a group called the

Regional Non-Commercial Fund or “Legality”³³. This group complains about the way municipal services are priced, and they cite examples from the energy supply situation. Prices are lower for consumption below the norm than for consumption above this limit. This is definitely an economic mechanism for reducing consumption, as well as being a sphere of commercial activity for municipal enterprises. However, the issue of where to set the norm is a political issue under the jurisdiction of the municipal head of administration. The article shows that there are significant variations between towns in the oblast as to where the limit is set. In Koriyazhma, the limit is 60 kWh per person/month, in Arkhangelsk town, 40 kWh, and in Primorskii municipality, 30 kWh. This shows that the further north one moves, the lower the limit for “over-consumption”. In the northern parts of Arkhangelsk oblast, the towns are not connected to the gas network. In recent years, coal and fuel oil supplies have been too irregular and too small to ensure proper heating in winter. In these towns, electric power is also used for space heating, in addition to running household appliances, sewing machines and the like.

7.7.6 Popular attitudes to the environment

Russian municipalities are governed by elected councils. Therefore, local inhabitants as voters and citizens may ultimately influence on the way local self-government perform its duties as policy actor and target group. In Koriyazhma, people are concerned about the environment, but apparently they do not consider environmental problems a nuisance to themselves personally. An opinion poll carried out in Koriyazhma in 2001 showed that the environmental problems were the main problem for the town, but that each respondent ranked these problems after six other problems at the personal level. On the other hand, health (and safety) was identified as the main individual problem. The close links between good health and low pollution make it tempting to interpret the opinion poll as reflecting clear concerns among local residents for the well-being of man and nature.

³³. See: Volna, 19.V.1998, "Normativy... s potolka?".

Table 7.7 *Problems, by order of importance*

'Problem for the town'	'Problem for me personally'
1. environment	1. safety and 1. health
2. employment	
3. security	3. alcoholism
4. low pay,	(-)
5. alcoholism, drugs, health	(-)
6. (-)	(-)
7. (-)	7. environment

(Source: Trudovaia Koriashma, 19 October 2001 'Sprashivaiut – otvechaite!')

Koriashma has got two newspapers – the paper mill's Kotlasskii Bumazhnik (Kotlas paper worker) and Trudovaia Koriashma (Working Koriashma), formerly the local organ of the Communist Party. An analysis of articles in the two papers shows that the environment is of concern and has been so throughout the decades of Koriashma's existence (Mikhailova and Davydov 2001). Until 1999, when Trudovaia Koriashma was sold to the paper mill, the paper was fiercely critical to the owners of Kotlas pulp and paper mill. The critical attitude manifested itself in articles on the environmental situation in which the pulp and paper mill – and the environmental committee – were given rough treatment³⁴. Since 1999, both local papers are under enterprise control. In both of them, there is full coverage of improvements of production technologies in the pulp and paper mill, but the number of articles on the environment has sharply declined since the mid-1990s.

The environmental consciousness in Koriashma is marked by the fact that the town is built as an appendix to a huge plant. As argued by Davydov & Mikhailova (2001) people in state socialist single-

³⁴ The editor also was critical towards the policies of the new owners of the enterprise: 'The enterprise is only oriented towards high profit. Since privatisation people in the enterprise are considered mere work force. When the owners/directors lived in the town themselves, they did something for the workers and the town,' she said. Meeting with Nadezhda Sukhoparova, chief editor of the local newspaper 'Trudovaia Koriashma' and her staff, Koriashma, 22.X.1997

enterprise towns were influenced by the Utopian ideas that adorned official rhetoric at the time, among them notions of the “garden city”.

7.8 The NEPIs in use

This sub-chapter will present and analyse the ways NEPIs are being made use of in Koriazhma. It will stick to the conventional division of NEPIs in three groups:

- market-based economic instruments (fines and fees)
- voluntary agreements (Environmental programme and Eco-fund),
- informational devices (environmental programme, national programmes)

In what ways do the major actors (the environmental committee, the polluter and the municipality) put the environmental instruments to use?

7.8.1 Market-based economic instruments in Koriazhma

As shown in chapter 6 (on the system for environmental protection) in Russia the main economic instruments are charges and taxes related to the system of payment for nature resources use. As a basic rule, in Russia, all use of nature and natural resources, including intake as well as emissions, is to be paid for. The system of payment is established by the Act related to Environmental Protection of 1991, but was introduced as early as in 1988 as a part of *perestroika*. Like all other industrial enterprises in Russia, the pulp and paper mill in Koriazhma must calculate the cost both of using natural resources and of exceeding the maximum permissible levels of pollution. Russian polluters are charged according to the amount of pollution they generate. The pollution fees (emission limits and rates to be paid for transgressions) are fixed by agreements between the enterprise and the regional environmental committee.

Although market-based, or economic, instruments are based on indirect mechanisms, they depend on a well-functioning system of *control*. In order for indirect methods to be used standards must have been set, and there must be a system of enforcement. Provision and deprivation of resources require direct enforcement. However, as it

will be shown in subchapters below, the economic instruments also depend on agreements and informational devices to function in full.

In Koriazhma, the major polluter, which is the pulp and paper mill, is under permanent observation by the environmental authorities. Russian environmental standards are strict and the environmental committee in Koriazhma has had a reputation for being a sharp-eyed *controller*. When carrying out its functions, the committee has several financial instruments at its disposal enabling it to play with market mechanisms, i.e. economic actors' willingness to reduce costs and maximise profits.

The inspectors from the environmental committee monitor the production processes of the pulp and paper mill, emissions as well as general environmental conditions in the area. Inspectors from the committee visit the enterprise regularly to prevent violations of the technological process and to check compliance with environmental quality standards, also in periods of inclement meteorological conditions. In Koriazhma, like elsewhere in Russia, the environmental committee works with the technical director in the enterprises, in some cases the chief engineer (see sub-chapter on the pulp and paper mill as a local environmental actor).

Serious breaches of norms and emissions standards, more than 5 times the PDK, are reported in the annual reports issued by the regional environmental committee. The same is true of large fines levied for environmental reasons.

Table 7.8 *Complaints against the pulp and paper mill (as registered in annual reports from environmental authorities)*

Year		Sum in (new) RUR
1997	Emissions into the river	109.400
1997	Insufficient cleaning of waste water due to non-compliance with technical regulations (in June)	4.932.700
1997	Insufficient cleaning of waste water due to non-compliance with technical regulations (in July)	3.790.200
1997	Emissions of sulphur dioxide into the air	1.420
1997	Accident leading to waste water flowing into river Vychegda	1.942.600
1998	Emission of pectol into the river	103.890
1999	Nothing reported	
2000	Wastewater flowing directly into the river due to non-compliance with technical regulations	74.090
2000	Accident leading to waste water flowing into river Vychegda	1.616.330

(Sources: Informatsiia o gosudarstvennom kontrole za sobliudeniem Zakona "Ob okhrane okruzhaiushchei sredy" v Arkhangel'skoi oblasti v 1999 godu; d.o. 2000 godu; Sostoianie i okhrana okruzhaiushchei prirodnoi sredy v Arkhangel'skoi oblasti v 1998 g.; Spravka ob èkologicheskikh problemakh gosudarstvennogo znachenia Arkhangel'skoi oblasti za 1997 god)

In the case of non-payment, the environmental committee has had the authority to close the enterprise. In the case study, the level of pollution would have permitted such a solution at times, but according to the head of the environmental committee, that would have been impossible due to the enormous importance of the mill for the town and its inhabitants. According to the head, generating more interest in technological modernisation among the directors of the enterprise was a better strategy.³⁵

Kjeldsen (2000) concludes that the Russian system of environmental payment did not offer sufficiently strong incentives until 1994 when a

³⁵ Interview in Koriashma May 1998 and Trudovaia Koriashma 27 I 1998, "Uvazhat' sebja zastavit matushka – priroda".

Pollution Charge Exemption Scheme was set up. The scheme allows an enterprise to apply for a maximum 50 per cent reduction in payment on the condition that the enterprise spends the same amount of money on environmental measures. In addition, the Eco-fund may help co-finance projects (see below). But often the level of the charges seems to be too low to influence polluters' behaviour.

In 1997, however, this system was applied in Koriazhma with promising results. The pulp and paper mill was severely fined due to pollution from one of its boilers. This sum was converted to an environmental project to build a new boiler based on clean technology. The new boiler reduced discharges to almost nothing³⁶. Here the threat of depriving the pulp and paper mill of a relatively large sum made it alter its behaviour in the sense that it made the step to modernise its production.

The Eco-fund at town level

The funds gathered by collecting fees and levying fines end up in an environmental fund, the *Eco-fund*, which provides the environmental authorities with a certain amount of earmarked means. This turned out to be one of the main environmental instruments used in Russia throughout the 1990s, and is considered by far the most effective of the new environmental tools. Formally, it is independent of the environmental committees. Eco-funds exist at central/federal level and regional/Federation subject level, as well as at local level. Eco-funds used to be among the so-called extra-budgetary funds, meaning their money was earmarked and out of reach of the politicians who set up central, regional and local budgets. In 2001, the Eco-funds, like other formerly extra-budgetary funds, were incorporated into the budget.

In Koriazhma, the local Eco-fund has been crucial for the existence of several environmental projects. As a result of the reorganisation of the environmental sector, Eco-funds at local level were abolished at the same time as the local environmental committees. The oblast-level Eco-fund still exists, although not as an extra-budgetary source of funding. Local environmental projects have to be financed through the oblast Eco-funds. In fact, the two employees of the former local Eco-fund still work in Koriazhma, but now as employees of the oblast Eco-fund. The Federation subject receives 81 per cent of the "revenues" of the Eco-fund, while the federal level receives 19 per cent.

³⁶ Interview with environmental inspector and former head of the Environmental Committee in Koriazhma, 7 December 2001.

How do the Eco-funds work? In Koriazhma, as elsewhere, the money collected in the fund is divided between mitigating measures and projects that aim at helping polluters improve their performance.

Let us take 1998 as an example. The project receiving the largest amount of rubles that year was the establishment of a landfill for household waste. Of the seven million rubles in the fund in 1998, four million rubles were set aside for the landfill. In 1999 a total of 6.6 million rubles was set aside by the Eco-fund for this purpose. When completed, this project will give Koriazhma the only landfill of this kind in the oblast. The municipality is the developer, and the environmental committee is co-sponsor.

Among the projects financed by the Eco-fund:

- ultrafiltration installation (with Institute of Northern Ecological Problems)
- establishment of Siberian pine vegetation
- a specially protected area close to the children's hospital
- draining the forest close to the town cemetery

The board of the Eco-fund in Koriazhma has applied a wide definition of environmentally relevant projects, but has not forgotten more classically nature-oriented projects like the planting of Siberian pine. In 1996 the Koriazhma branch of Pomor University could not pay its electric bills to the municipal housing enterprise. In 1996 the municipal enterprise and the Eco-fund went together to waive the debts, and they did the same thing in 1997.³⁷ This is not environmental protection *stricto sensu*, but the local university branch teaches subjects such as ecology and chemistry, which are considered to have positive effects on environmental awareness and the capabilities of young professionals in the local area.

Money from the Eco-fund has also been used to improve public health, e.g. by providing some support to sanatoriums. In Russia, health and environment are closely associated in the minds of the people.³⁸ Besides, as we saw above, the sanitary-epidemiological sector plays an important role in environmental protection.

³⁷ See Kotlasskii Bumazhnik 13 IX 1997, 'Zdes' iunye litsa, molodye golosa'.

³⁸ An illustrative example is offered by delegate to the Oblast assembly from Koriazhma, E. Zaruma, who accuses the people responsible for environmental protection in the regional administration for not being

The debts of the pulp and paper mill to the Eco-fund have partially been repaid by letting children swim for free in the enterprise-owned swimming pool. This kind of non-monetary swapping of debt is also used elsewhere in Russia, for instance in Iaroslavl' (Kjeldsen, 2000). The Eco-fund supports sewage projects, e.g. one for the local police whose huge building was without sewage disposal. The Sanitary Service, which has a strong position in Russia, has the right to fine polluters, but the service has no earmarked funding. Accordingly, the Eco-fund also gets involved in fields otherwise under the auspices of the Sanitary Service.

One might object that environmental interests are not very well defended when the Eco-fund is used to pay electric bills and run swimming pools. On the other hand, these practices may help strengthen the environmental cause since they link environmental issues with social welfare issues. The practices may help local environmental authorities as well as the environment by encouraging issues to take root locally. As was the case when the environmental committee acted as a controller, it performs its function as a source of funds in a pragmatic, adaptive way. And the pragmatic approach helps it gain social acceptance even if it is at the expense of achieving purely environmental gains.

Eco-fund going political

In 2001, Eco-funds ceased to exist as independent, extra budgetary, organisations. Polluters' payments will henceforth be incorporated into oblast budgets.³⁹ The Eco-funds continue to exist, but they deal exclusively with technical tasks.⁴⁰

It is no longer up to the Eco-funds themselves at oblast or local level to decide what to spend money on. Spending is now a political question under the aegis of the oblast-level Assembly of Deputies. This means the Eco-fund as a policy instrument has changed hands from people who deal with the environment on a professional basis to

concerned about people's health. Instead they are after the money in the Eco-fund, he says. See: Volna, 13 XI 2001, "Oblasti nuzhno pravitel'stvo".

³⁹ This was established in an oblast-level act "On the oblast budget for 2001". Section 45 of that act stated that the revenues in question were based on "payments for emissions into the air above as well as below the standards, emission of harmful substances, waste disposal and other harmful impacts on the environment".

⁴⁰ According to a resolution (postanovleniie) by the Arkhangelsk oblast administration (of 25 April 2001, no. 215), the Eco-fund is a "regional-State" issue.

democratically elected members of the Oblast Assembly. The people who used to serve on the boards of regional and local Eco-funds mainly represented environmental *policy actors*. The Eco-fund was an important instrument in the hands of the policy actors, who sometimes defined the environment very widely. From now on, the application of the Eco-funds will be a purely political question. From the perspective of transparency and democracy, this is a step forward. As an environmental policy instrument, however, the Eco-fund may become weakened since popularly elected representatives may be expected to have close relations with the dominating enterprise. In other words, the Eco-fund may lose strength because it is not distinct enough.

Interestingly, the Oblast Commission on Environmental Protection is headed by Vladimir Krupchak, who is elected from Novodvinsk. The vice-head is Evgenii Zaruma, from Koriashma. In other words, the two heads of the environmental commission represent the two biggest polluting towns in the region.

As for Krupchak, he is the main owner of the pulp and paper mill in Novodvinsk and owns a lot of other valuable assets in Arkhangelsk. Having him as the chairman of the environmental commission under the oblast legislature is a blow to the tendency towards differentiation.

It is nevertheless worth noting that the commission's vice-head Zaruma, unlike Krupchak, ran "in opposition" to the owners of his hometown's mill. Ilim Pulp Enterprise made general director at the mill, Iurii Zaiats ran as a candidate. Although supported by contemporary campaigning techniques brought in from St. Petersburg, he lost the election. Zaruma's background is from a construction company in Koriashma that went bankrupt due to a halt in orders from the paper mill.

Nevertheless, both Krupchak and Zaruma belong to the forest-industrial complex and the pulp and paper mill sector. In other words, it was hardly surprising that the commission suggested that a 60 per cent share of environmental payments be set aside for use in the municipality of the paying enterprise.

In the Arkhangelsk region, total Eco-fund funding is divided 40/60 between environmental measures at oblast and local level, respectively. It was the task of the oblast administration to present an environmental programme for 2001, but it proved difficult to distinguish between environmental and other kinds of projects, a fact that illustrates the point made above on possible weakening of the policy instrument. The Oblast Assembly, whose task it is to adopt the programme, could not agree on how to divide the spending between

industrial towns and other parts of the region. After all, since the fund consists of payments from pollution, the industrial towns are by far the largest contributors. On the other hand, environmental problems like lack of clean drinking water, is a serious problem in the countryside. Another controversy arose over a proposal to let the polluting enterprises keep more of the environmental payments without circulating the money through the Eco-fund and back again to environmental measures in the enterprise.⁴¹ ..

The controversy was triggered by diverging ideas on how to spend the money. Two main positions were discernible: one favouring distributing the money among environmental projects all over the Arkhangelsk region, and a second position that wanted to let polluters make environmental improvements rather than pay into the Eco-fund.

The first position was supported by the oblast administration, which wanted a mere 30 per cent of what the pulp and paper mills pay to the Eco-funds to be refunded in the form of environmental measures under the oblast or town environmental programmes. Deputies from the three industrial towns in the region, Koriazhma, Novodvinsk and Arkhangelsk, fought for the second alternative, suggesting that 60 per cent of what is paid by a given municipality be earmarked for use in that municipality.⁴² ..

Proponents of the first position argued that polluters should remedy the harm they have caused. In the case of Arkhangelsk oblast, this means the pulp and paper mill should pay for curing people who have fallen ill due to pollution. That could be done by spending money from the Eco-fund on specific healthcare programmes. For instance, the vice-head of the Arkhangelsk oblast administration suggested supporting prophylactic measures such as immunisation programmes for children growing up in polluted areas. A deputy from a remote part of Arkhangelsk oblast argued that money should be spent on a clean water supply. In her home municipality, there were almost no polluting activities, and getting back 60 per cent of what was paid in would translate into practically nothing. Besides, she argued, the drinking water in her town comes from the Northern Dvina River which is highly polluted by the Kotlas Pulp and Paper Mill in Koriazhma. She was therefore opposed to the idea of returning the money collected from polluters back to their host municipalities. However, the vice-chairman of the oblast environmental committee,

⁴¹. See: Volna 24 IV 2001, "Kak razdelit' èkologicheskii pirog".

⁴². See: Pravda Severa, 25 IV 2001, "Deputaty osvoili èlektronku, no zabuksovali na èkologii".

A. Miniaev, defended the second position, that of spending money in the municipalities where payments were generated. He even argued that 20 – 25 per cent of the means the polluters were required to pay to the Eco-fund should stay in the enterprise for environmental measures without being circulated through the Eco-fund. His argument was that Eco-funds are currently the only economic mechanism that offers environmental improvement incentives for polluters.⁴³

The town-level environmental programmes have been established by the local government with the participation of various departments of the oblast administration. The programmes are run by the Oblast Committee on Environmental Protection⁴⁴. The oblast committee, which is administrative, must not be confused with the oblast commission, which comprises the deputies.

Summing up on the use of economic instruments

The use of economic instruments in Koriashma depends on strict control, and the insistence that public authorities have the right to interfere if environmental standards are not observed. Control is a precondition for economic instruments. The incentives stems from the pulp and paper mill's possibility to avoid paying fines if environmental measures are undertaken. Another clear feature is that economic instruments work in combination with agreements and informational devices.

With these principles as the basis the environmental committee and the enterprise have made use of economic instruments in a way that is in accordance with the principles lying behind NEPIs. Exempt schemes and the eco-fund have enabled practices that point towards the NEPI principles of polluters taking responsibility on their own.

The environmental committee performed its role as a controller somewhere between the strict provisions of the law and the most liberal interpretations of the opportunities for making exceptions, but maintained its separateness by referring to its being a state body. This meant the committee maintained a dialogue with the pulp and paper mill. The committee renounced the use of the strictest methods of control. Instead, it struck deals, reached understandings and made agreements with the polluter. In this way, it was able to make environmental concerns take root on a small scale.

⁴³ See: Volna 24 IV 2001, "Kak razdelit' èkologicheskii pirog".

⁴⁴ The committee was established by oblast level Act No. 15-3-03 of 20 February 2001 "O skheme upravleniia Arkhangel'skoi oblast'iu".

The fact that the Eco-fund has been taken out of the environmental sector's own control and been made a part of the activity field of the regional legislature, may further underline these latter aspects. In other words, the close intertwining of actors, with the environmental sector and the environmental instruments being a part of bigger compounds, is not necessarily a drawback.

7.8.2 Voluntary agreements

As argued in chapter 2, NEPIs treat target groups as environmentally responsible actors able to enter into partner-like relationships with the environmental authorities. As indicated in the section above on economic instruments Russian environmental authorities and polluters enter into agreements of this type. Here, agreements will be presented in more detail. Agreements are set up as part of the pollution exemption schemes and the activities of the eco-funds. As it will appear the agreements as used in Koriashma are not purely voluntary. They are voluntary in the sense that the polluter could have chosen to pay the fines instead of entering an agreement, but behind that again is control. Furthermore, the agreements are partly economic instruments, since they offer economic incentives. Dynamism seems to emerge between economic and voluntary instruments, and the eco-fund is the instrument where the two principles meet each other.

There is a long tradition for making agreements in Russia, not least in local politics. As noted in chapter 4.2.4., Iu. G. Lezhikova (1998) argues that "fiduciary law" could play a role in the regulation of municipal economic activity. This type of law is based on trust, moral norms, business norms, habits, and religious norms. There is reason to believe that such factors play a more important role as key actors are tightly connected, as they would be in a company town. This is conducive to the use of agreements.

Example – the Eco-fund and the pulp and paper mill

As indicated above, the Eco-fund also deals with polluters and is a major instrument around which all three main environmental actors interact. The Eco-fund can offer incentives for polluters to improve their cleaning technologies. The pollution charge exemption scheme described above means that the Eco-fund can in fact swap debts on the condition that the polluting enterprise carries out environmental measures for the sum it otherwise would have had to pay the Eco-fund. For instance, in 1999 a total of 15 projects carried out by and in the pulp and paper mill were financed or co-financed by money that would otherwise have ended up (temporarily) in the Eco-fund. In

addition, the Eco-fund financed one project in the wastewater treatment plant owned by the pulp and paper mill directly⁴⁵.

As we saw above in the case of the environmental programme and will see below on the Eco-fund, the pulp and paper mill interacts closely with the environmental sector in the town. The *agreement* made in February 2000 between the pulp and paper mill (the “nature user”), the oblast level environmental committee and Eco-fund and the Eco-fund of Koriazhma (represented by the mayor) is a prime example. The agreement states that a sum of 63 million rubles is to be transferred from the pulp and paper mill to the Eco-fund at oblast level every year. Then the Eco-fund is obliged to re-distribute the money according to the following scheme: The Eco-fund in Koriazhma gets 42 million, of which ten million is set aside for the town environmental programme. The remaining 32 million received by the local Eco-fund are transferred to the work on the gas pipeline that will reduce air pollution significantly when it reaches Koriazhma. This latter project is allocated an additional three million directly from the oblast fund, and ends up with a total 35 million. The remaining 18 million (of the original 63 million) remain at oblast level and are assigned to the regional environmental programme.

Interestingly, the amount does not seem to be contingent on the amount of money the enterprise owes the environmental authorities (fines and fees). In addition to the 63 million rubles, the pulp and paper mill is required to make environmental improvements for the sum it owes the environmental authorities (the Eco-fund). Furthermore, under the agreement the enterprise is required to provide a 20 million ruble grant to the medical-sanitary centre in Koriazhma.

7.8.3 Informational devices

Environmental policies are more robust if they are based on a common understanding of environmental problems. Therefore much attention is paid to *knowledge* within the NEPI way of thinking. Structured dissemination of environmental information and analytical approaches is a typical NEPI. Environmental information campaigns, general or directed at specific actors, clearly defend their place in the new environmental toolkit. NEPIs are knowledge-intensive.

Narrowly defined, informational instruments refer to campaigns that propagate aspects of environmental friendly behaviour. More broadly,

⁴⁵ Èkologicheskaja programma MO "Gorod Koriazhma" na 1999g. Reshenie ot 02 VII 1999 No. 234.

it may refer to facilitating the emergence of an advocacy coalition. In Koriazhma and other industrial towns elements of this broader approach may be identified in the activities spurred by the *town's environmental programme*.

Below, the environmental programme will be treated as an informational instrument. Just like the eco-fund the environmental programme mixes elements from economy, agreements and information. And just like the eco-fund, with which it is intertwined, it involves participation from state, self-governmental as well as business actors, thus being in conformity with NEPI principles.

The environmental programme – a mixed instrument

The town's environmental programme contains a list of the most important environmental measures. The list is further elaborated upon by the environmental committee, and then confirmed by a resolution handed down by the head of administration. In Koriazhma, the mayor is also the head of administration. As part of his annual report to the town дума, the mayor reports on the activities mentioned in the environmental programme.⁴⁶

The institution of a "town environmental programme" has made the town authorities set priorities in collaboration with the environmental committee, also in the period when the latter was a state body at local, and not only regional level. Interestingly, as will be elaborated upon below, the pulp and paper mill also is a subject for the town environmental programme. Thus a certain amount of collaboration takes place between the state authorities and community (local self-government and the enterprise). The environmental programme is a meeting-place for local decision-makers with a say in environmental matters, policy actors and target groups alike.

The programme is divided into seven sections: air, water resources, land, vegetative life (including forests and the urban environment), ecological control, public health and ecological education. Interestingly, all environmental projects are included in the programme, regardless of their source of funding. Even projects financed by the pulp and paper mill are included, e.g. the modernisation of parts of the most polluting production technology. These are, in fact, the most ambitious projects listed in the programme. Other projects are typically jointly financed by the Environmental Fund and the town budget. This applies to projects aimed at modernising municipal infrastructure (e.g. wastewater and

⁴⁶ See for instance: Municipal'nyi vestnik, No 6 (aprel') 1998.

household waste treatment) as well as projects concerning parks and vegetation in the town.

In 1997 the environmental programme cost 32.5 million rubles, and in 1999 the cost was 37.3 million rubles. Most of the truly expensive projects involve the pulp and paper mill. In 1997 the main projects were the reconstruction of one of the boilers in the mill (air), the building of a household sewage unit in the wastewater treatment plant of the pulp and paper mill (water) and preparations for the establishment of a landfill (soil). In 1999 the main focus was on non-chlorine bleaching.

The items in the programme are not always implemented on time. For instance, the 1999 annual progress report on the programme showed that nine of the 15 projects involving the pulp and paper mill had yet to be initiated. Nevertheless, some 37 295 000 rubles were spent on projects that were started, continued or completed by the pulp and paper mill⁴⁷.

The programme lists environmental measures taken in response to several environmental policy instruments, but mainly the economic ones.

The substantial sums involved makes local decision-makers pay due attention to their work with the programme, although it is the economic instruments, not the programme in itself, that bring up the large sums. This again may have learning effects.

7.9 Summing up on Koriashma

This chapter has identified and analysed the use of environmental policy instruments in one particular industrial town. Did the way they worked have elements in common with the ideas behind the concept of new environmental policy instruments?

By way of introduction this chapter put forward three assumptions that gave NEPIs very limited prospects in the Russian setting. How did the assumptions fare when confronted with empirical realities in Koriashma?

⁴⁷ Vypolnenie ékologicheskoi programmy MO "Gorod Koriashma" na 1999g. (Issued by the Department of Environmental Protection on the town administration for the mayor and the chairman of the permanent commission on social affairs of the town дума).

An answer to that question was sought in an analysis of the relationship between the new policy instruments and the surroundings in which they have been set to operate. The case is analysed as a configuration of elements, as suggested by Ragin (2000: 68). Just to repeat from chapter 5.3.2, these parts may be:

- institutions
- path dependencies
- social structures
- historical patterns and trends
- routine practices
- singular events
- event sequences
- connections to other cases
- the case's larger environment (Ragin 2000: 68).

By way of conclusion the NEPIs in action as presented in this chapter will be viewed in the light of Ragin's configuration of elements which is held to constitute the logic of the case. It is worth noting that the terminology in this thesis differs from that of Ragin, mainly by dividing more sharply between the phenomenon of study and the micro as well as macro levels of context (where Ragin operates with the case and its parts). Nevertheless, Ragin's configurational case logic is applicable. We view the NEPIs as instruments being made use of within a specific institutional context by a policy actor with certain contextually given characteristics and a target group no less contextually shaped.

The economic NEPIs and the assumption of weak differentiation

First, it was expected that actors were too integrated to be able to act as policy actor and target group respectively, which is of particular importance for the application of economic instruments. The expectation was based on an anticipated dynamic between the phenomenon of study (the NEPIs) and their surroundings on a micro level (the site or single-enterprise town) as well as a macro level the context of Russian former state socialism).

In particular since the study was to be carried out in a single-enterprise town the expectation of low differentiation was strong. Several factors contributed to this, among others the legacy from pre-perestroika times when environmental concern was left with the enterprises themselves. Another factor was the town's total dependency upon the

pulp and paper mill that in addition was a cornerstone in the regional economy. In other words, path dependencies, routine practices and the case's larger environment were held to slow down differentiation making an assertive environmental committee not very likely to appear and thereby economic instruments weak.

The environmental committee at local (and regional level) was a child of late 1980's perestroika and early transformation in the beginning of the 1990s. Then environmental protection was singled out as a separate branch of public administration in parallel with the process of making enterprises independent and profit-oriented, in short as a part of an overall push for differentiation.

What we found in Koriyazhma was an environmental committee eager to assert itself as an actor independent of local power-holders. The head of the local environmental committee emphasised the need to make sure it was a policy actor distinct from the target group. She argued explicitly for the committee's status as a de-concentrated field office of the state environmental authority. Its status as a state body was useful because it gave the committee a potential backing from federal level institutions external to the forest-industrial complex, which is held to be necessary to constitute a match for the otherwise omnipotent paper mill. Local self-government bodies would be less able to play the role of policy actor due to their dependency on the enterprise. In other words, differentiation formed a part of the strategy of the local head of environmental administration with which she succeeded to a large degree.

In fact, the performance of the environmental committee in Koriyazhma contradicts the assumption put forward in this chapter. The delineation between public administration and industrial production turned out not to be unambiguously blurred. This chapter shows that the environmental committee in Koriyazhma aimed at being clearly separate from the pulp and paper mill and was able to effect its purpose in this respect. Clearly, there existed a policy actor and a target group in Koriyazhma. The environmental sector was able to assert itself.

These developments, however, were hampered both as a result of the general weakening of the environmental sector from the late 1990's and the dissolution of the local level de-concentrated unit of environmental protection. One of the results of the changes was that local self-government took over more of the tasks of the policy actor responsible for environmental protection. This was a tendency towards re-establishing "multi-functional institutional compounds".

The tendency set off as early as 1998 in Koriazhma when the local committee was abolished. The people working on the local committee continued working with environmental issues at the local level, but were dispersed among several organisations. The head of the former committee continued working as an inspector at local level as an employee of the oblast committee. The same year – in 1998 – a municipal department for environmental protection was set up in Koriazhma. Interestingly, according to the mayor, the justification for this step was the local self-government's need to "balance" all policy fields covered by decentralised state bodies.

Sweeping changes were made federation-wide through the changes introduced by the presidential decree of May 2000. The decree reversed the tendency towards a specific unit working with and for the environment since environmental protection was merged with nature resource use. To a certain extent, the "disappearance" of the environmental sector at the local level has been remedied by the local self-government being assigned considerable formal jurisdiction on environmental matters throughout the 1990s, although the follow-up was not especially active. From the Koriazhma experience, however, it is too early to conclude that we are witnessing the municipalisation of the role of environmental policy actor. After all, the environmental department under the local self-government consists of only one person. Nevertheless, making relatively more of the environmental policies a task under the local self-government puts the policy field in danger of being less able to assert itself.

What may seem to be a development in concordance with standard recommendations to countries in transition – reducing state presence, increasing the role of local self-government – may undermine the functioning of NEPIs simply by making policy actor and target group too closely connected with each other. Local self-government is dependent on local power-holders. For all practical purposes the pulp and paper mill finances the town by providing jobs for the inhabitants, paying surplus taxes to the town, and continuing to finance several cultural and health institutions.

Nonetheless, in Koriazhma, like all over Russia, the "town-constituting" enterprise has rolled back to mainly concentrating on production and profits. In this respect differentiation has taken substantial steps.

The fate of the Eco-fund shows the opposite tendency. The Eco-fund has been abolished at local level, but this may prove not to be too dramatic. Two people still work for the Eco-fund in Koriazhma

(although no longer employed locally, but by the oblast committee) and money will be spent locally anyway. More problematic is the fact that the Eco-fund is no longer independent of public budgets. Decisions about how to spend the funding are no longer made by the Eco-fund's board, but by the self-government assembly at oblast level. This blurs the distinction between the environmental sector and other sectors since politicians may be expected to be less one-sidedly concerned about the environment than the former Eco-fund boards comprised of full-time environmentalists. In a situation where voters tend to vote for candidates with accumulated economic power from ownership or job positions in the large, polluting industries environmental concern may easily lose out. Suffice it here to recall the fact that the oblast commission on environmental under the regional, elected council is headed by two representatives from the region's largest pulp and paper mills.

When seen in combination with the merger of the environmental sector with the sector of nature resource extraction we see an overall pattern of an environmental sector that grows less distinct from other sectors of public policy. For the period covered by this study these developments were too recent to be of much significance.

All in all, this chapter has shown that economic instruments have been used actively. The environmental committee has been charging the enterprises for use of natural resources and emissions. The sums have been moderate. Instruments have not brought about a large flow of resources between policy actor and target group to use the language of Klok (1995). The importance lies in the fact that practices have been established for taking in and giving out of resources between the two main types of actors. These practices may prove to be sustainable in a longer run. The close-up perspective on dynamics enabled by the case study approach allows for this observation that could otherwise have been lost in pessimism due to the low amounts of money conveyed by the economic instruments.

However, assertion through insulation is not enough since NEPIs base themselves on a second step, which is that of entering into non-hierarchical co-operation, and a third one consisting in developing and underpinning environmental knowledge in co-operation with target groups and the public.

Voluntary agreements and the obstacles to non-hierarchical ways of interacting

The second assumption was that the non-hierarchical way of interacting, which is characteristic of some NEPIs, would be too alien

to be able to serve as a framework for policy-making in a Russian single-enterprise town in the short term at least. This assumption was held to be of particular relevance for the fate of one of the NEPIs, i.e. the voluntary agreements. The assumption is based on what was identified in chapter 4. Several among the elements brought up by Ragin are of relevance here.

Agreements in this thesis refer to local agreements between the pulp and paper mill and the environmental authorities. Agreements are set up within the system of the Eco-fund and debt swapping arrangements.

To the extent that old habits prevail, control would be expected to be the preferred alternative to the authorities. Looking into the internal organisation of the environmental committees discloses an organisation focused on control. Routine practices are oriented towards control. The employees of the environmental committee are called inspectors, and their activities are usually referred to as inspection and control. In this respect the relatively fresh environmental protection section of the overall machine of public authority is a replica of other sections covering other policy fields.

Control is an institution in Russia permeating the public authorities. Furthermore, taking a look at the wider context, the position of industry and nature resource extraction is so strong politically that environmental authorities may want to retain what powers they may have in stead of entering into agreement with a far stronger counterpart. To sum up, the instrument of setting up environmental agreements enters into a context where several elements tend to weaken it.

On the other hand, despite all the contextual circumstances that were held to impede the working of environmental agreements, substantial environmental agreements have been set up between the environmental committee and the pulp and paper mill. Looking more closely into the case's environs, some elements are found that strengthen the prospects of agreements. Survival of practices established during Soviet industrialism may have taken place also in ways that helps agreements come true.

The lack of trust, which is often associated with former state socialist societies (see chapter 4) does not necessarily make itself felt in all aspects of the communication between environmental policy actor and target group. There are several reasons for this. The close relations between authorities and producers under state socialism prepare the ground for smooth use of the agreement as a policy instrument. The

habit of making agreements is already ingrained. The fact that the industry was responsible for its own environmental protection under state socialism has left behind strong environmental departments in the enterprises manned by people sharing educational and often workplace background with the people in the environmental committee. They have all gone through education, training and employment as technologists within the field of wood-processing technology. Furthermore, exchanging debts for technological improvements to the benefit of the environment may be expected to be considered a good solution not least because the enterprises need to modernise in order to be competitive. For instance, using non-chlorine bleaching is a pre-requisite for being taken seriously as a pulp and paper mill.

Above, the tradition of fiduciary law was presented according to which informal, but binding agreements are made. Here, control and hierarchy is left aside to the benefit of agreements based on mutual trust. In this respect social structure may underpin the process of setting up agreements. The existence of a tightly knit segment of the technical “intelligentsia” contributes to this picture. They all have a background in the pulp and paper mill’s environmental department. Some still work there, and others work in the environmental protection sector or in local self-government. Although they work for employers with divergent interests, they have a common professional background that eases communication.

Although emphasising its independence and insulation the environmental committee has made use of the Eco-fund to enter into dialogue with both the paper mill and the society. The debt swapping has entailed tight co-operation between the policy actor and the target group. The actual use of the money gathered in the Eco-fund shows that the Eco-fund and the environmental committee have been eager to forge links with society. The offer to finance the university branch’s electricity bill and the town’s swimming pool are emblematic in this respect.

Epistemic community, the Eco-fund and the use of environmental programmes

The third assumption consisted in a non-belief in the prospects of an epistemic community to underpin the use of NEPIs. Pragmatic environmentalism shared by authorities, target groups and environmentalists are observed to play a role in highly developed Western societies. In Russia authorities and polluters do not see environmental problems as systemic, and industry tends to reject

environmental concern. Environmental groups, on their hand, have a fundamentalist inclination which hampers their dialogue with the authorities and industry.

In this thesis the activities around the local environmental programmes were analysed in order to see whether an epistemic community nevertheless evolved. Environmental programmes are a potential vehicle for the development of a common environmental concern involving policy actor, target groups and the public alike. In Koriyazhma, all environmental actors, the environmental committee, the pulp and paper mill and local self-government take part in the work with the environmental programme.

As an instrument the town environmental programme is well-equipped with links to contextual elements. For instance, the practice of making agreements presented above may be to the benefit of the town environmental programme. The way of working is not alien to the relevant actors. Furthermore, although Russian enterprises are held to keep environmental concern at a distance the large enterprises with a long standing still have an environmental department, as shown above. Environmental concern is institutionalised with the enterprise. This means that the enterprise have professional people that can enter into talks over an environmental programme with local self-government officials and environmental committee officers, who by the way usually have a background in the enterprise themselves. In other words, communication flows easily. In addition the environmental programme have connections to other instruments, namely that of the Eco-fund, which is important since it provides funds.

To sum up, when looking at the town environmental programme and its functioning as a configuration of elements, it comes clear that the instrument's functioning is sustained by the elements with which it connected. These elements constitute a supportive surrounding in the sense that a significant number of people involved share educational background and tend to have worked in the industry themselves. The local environmental programme, which is set up by all major environmental actors in Russian towns, is a meeting-place where a common knowledge base and understanding of the problems may develop.

Conclusion

At the outset of this study the basic characteristics of NEPIs seemed to be noticeably out of step with the Russian context. Through a close-up study of the configuration of the instruments and surroundings another

picture was discernible. We saw new environmental instruments that were fragile, but that nevertheless had struck roots. It turned out that the Russian setting of former state socialism, as exemplified by the Koriashma case, was not unambiguously disadvantageous for the operation of new environmental policy instruments. Thanks to linkages to path dependencies, social structures, routine practices and the larger context the new instruments were able to earn themselves a position.

By looking at how the instruments worked, we were able to see the configurational logic of the case, which accounts for the explication of why they work.

8 The use of NEPIs in a Latvian single-enterprise town

This chapter presents the use of NEPIs in one Latvian single-enterprise town along the same patterns as NEPIs in Koriazhma were analysed in the previous chapter. Just like in the chapter on the Russian case, this chapter focuses on the three main environmental actors (the state environmental authorities, the local self-government and the polluting enterprises), and the ways they undertake activities as a result of the NEPIs (economic instruments, voluntary agreements, and informational devices).

The aim of the chapter is to analyse the relationship between new policy instruments and the surroundings in which they are set to operate. By contrasting the Latvian case with the Russian one this relationship will be highlighted. The Latvian and Russian “surroundings” have some basic features in common, but also some dissimilarities.

By way of conclusion the preceding chapter analysed the findings in the light of Charles C. Ragin’s (2000: 68) case configuration logic. It provides a useful framework for answering the question on *how* the instruments operate, which is the basis for telling *why* they operate as they do.

8.1 Some assumptions

Just to recall the three main assumptions:

- Weak differentiation prevails and hampers the use of new environmental policy instruments (has an effect on the use of on economic instruments)

- Non-hierarchical relations between policy actor and target group are difficult to establish (effect on agreements)
- Epistemic community is weak (effects on environmental programmes)

These assumptions are derived from one basic assumption that past events and choices is an important factor shaping today's modus operandi. Treating former state socialist countries as one group assuming a common set of features that make them confront a common set of challenges is a result of this way of thinking. Russia and Latvia, then, would belong to the same category of countries. We would expect the introduction and operation of NEPIs to fare more or less the same way in Latvia as in Russia. Both countries belonged to the autocratic Russian empire, and both went through industrialisation and post World War II modernisation under "Soviet rule".

Latvia differs

On the other hand, as we saw in chapter 4, there are also major differences between the two countries. Some of them may have a bearing on patterns of behaviour, expectations, language habits, organisations, in general the institutional context into which NEPIs are introduced. The differences play a role in the everyday practices of public policy in Latvia. They have been taken seriously, emphasised and made use of in the post-Soviet Latvian process of nation-building. Nation-building (rejecting the Soviet past) and the setting-up of legal and administrative structures (in accordance with mainstream Europe) have been intertwined in Latvia since the beginning of the 1990s. Therefore, state socialism may prove to have less impact of the contemporary situation in Latvia than in Russia. It is easier to turn the back to the state socialist past for Latvian authorities than it is for their Russian homologues.

First, the autocratic regime under the tsars in Moscow was experienced differently in the Baltic provinces, where German practices prevailed locally, than in Russia proper. In Russia there was autocracy, in Latvia autocracy within limits. Second, the introduction of state socialism was a purely Russian manoeuvre with no external forces playing a role. In Latvia, the inclusion of the republic into the Soviet Union was a result of a highly involuntary annexation. In Russia the Soviet system was home-grown, in Latvia it was imposed, exogenous and alien. Besides in Latvia state socialism came almost 30 years later than it did in Russia. These factors made the whole economic and administrative set up easily portrayed as both shallow and illegitimate in Latvia. After state socialism Latvia proclaimed

institutional discontinuity, among others by re-installing the 1922 Constitution.

At this point it might be useful to follow up the table presented in chapter 4, showing the developmental paths of Russia and Latvia. The table's blanks for the period after state socialism were not filled in. Below they are (see A and B).

Table 8.1 *The institutional configurations of post-socialist Russia and Latvia*

	Prior to state socialism	Transition to state socialism ➔	State socialism	Transition from state socialism ➔	After state socialism
Latvia	Autocracy with limits	Exogenous	Soviet type	Institutional dis-continuity	A
Russia	Autocracy	Endogenous	Soviet type	Institutional continuity	B

A – Latvia	B – Russia
Widely shared and explicit wish to break with institutional habits of the past	Wish to break with institutional habits of the past combined with willingness to make use of them
Organisational set-up of public administration thoroughly Europeanised	Organisational set-up of public administration thoroughly reformed, but based on “Russian” ways
Most policy fields deeply involved in international co-operation and exchange, which internationalises ideas of “right and wrong” as well as “relevant knowledge”	Policy fields involved in international co-operation and exchange, but “right and wrong” and ideas about “relevant knowledge” primarily endogenously defined

At this point, it is worth repeating that the two cases will be contrasted (rather than compared) in order to bring to the fore the configuration of institutional elements with which the NEPIs have to relate. The table points at differences between the two cases. The differences are systematic and inter-related, but they are nevertheless referring to

degrees, and not to absolute differences. Both are cases of post-socialist transformation of policies and instruments of environmental protection. The difference consists in Latvia tending towards lender-driven policy transformation in the sense that an entire package has been accepted (voluntarily, that is). The Russian case is more borrower-driven. It could be summed up as “pick and choose” (within limits set by international agreements ratified by Russia).

8.2 The site – a cheese-producing town

Preiļi is not typical of the post-Soviet towns that grew up around one enterprise. (The Russian case town, Koriashma, is archetypal in this sense). Preiļi as a settlement is old, and used to be one of those largely Jewish-inhabited towns so typical for the area between the Baltic and the Black Sea. Today it has 9,400 inhabitants. The town went industrial in 1972 when the cheese factory (Preiļu Siers) was established. Preiļu Siers is the dominating enterprise. Although being less of a monopoly employer than its counterpart in Russian Koriashma, it shares most features of traditional post-Soviet dominating enterprises (like being an owner of communal infrastructure and having its own political presence in local self-government).

Preiļi is situated in the Latgale region which is one of the Baltic regions hardest hit by post-Soviet economic decline. The cheese factory, however, is considered a success, able to export cheese in large quantities to the European Union. Nevertheless the town is among the net receivers of state municipal funds.

Just like in the Russian town presented above, there were three main actors in the Latvian town: the environmental authorities, the municipality, and the polluting enterprise.

8.3 The environmental authorities

The regional board

Preiļi town belongs to the Daugavpils region of environmental management. Daugavpils Regional Environmental Board had 76 employees in 1997, which was reduced to 56 in 1998.⁴⁸ In 2000 there

⁴⁸ Interview with Pavel Kacar', head of the Daugavpils Regional Environmental Board, 6 May 1998

were 48 employees and in 2001 the number had risen to 52 (Latvijas 2001: 5; 2002:5).

The Regional Environmental Board itself is mainly doing control. In 2000 it carried out no less than 4345 inspections, which makes for 188 inspections per inspector. In 2001, however, the average was down at 152 per inspector, 3326 inspections in all (Latvijas 2001:12; 2002:13).

The Regional Environmental Board is not involved in playing with economic instruments. The only influence the Regional Environmental Board has is through the settling of discharge limits.

Being the main environmental policy actor regionally the board is working with polluting enterprises and local self-governments. The relations with Preiļu Siers were uncomplicated. "In principle" the factory had solved its wastewater problems, but this was dependent upon a relatively low production. The board would have liked to have a better overview of where the whey is disposed of. Whey is considered the main environmental problem caused by the cheese factory.

Making alliances with local self-government to strengthen the environmental causes seemed to be difficult. The head of the board complained that very seldom representatives from the municipality in Preiļi visit the Regional Environmental Board in Daugavpils to get assistance in preparing projects and getting them through. Preiļi has had a lot of proposals, and quite many have been really good, but none of them have passed through. In other words, the local self-governmental authorities in Preiļi took its responsibility as a policy actor in environmental affairs seriously, but failed to forge the links with like-minded de-concentrated bodies of central state power.

The regional board issues an annual report with details of its activities. Among others the report includes a list of projects (planned, on-going and completed). In the 2000 report altogether seven projects in the district of Preiļi were listed (Daugavpils 2001). Three of them concerned Preiļi town: The biggest one consists in reconstruction of the central heating station (reducing the use of crude oil through the use of wooden chips from local saw-mills). The cost is 1.4 million lats, an equivalent to 2.05 million euro (2000–2002). Also the second project aimed at reducing the use of crude oil through the use of wooden waste in the boiler-house of the town's building enterprise. The reconstruction here cost about 160.000 lats, or 252.000 euro. The

smallest project consists in improving the sewage net (13.000 lats, or 20.500 euro).

The district department

The cheese producing town of this study belongs to the Daugavpils Regional Environmental Board, the easternmost of its kind in Latvia. The board has four district departments, one of them covering the administrative district of Preiļi. The tasks of the district departments consist in (Latvijas 2002:7):

- Controlling that environmental and nature resource regulations are observed
- Carrying out programmes, plans and projects of the environmental and nature resource authorities
- Controlling the observance of environmental limits
- Controlling the observance of nature protection regulations (flora and fauna)
- Checking the compliance with environmental regulations of new constructions or reconstructions

In the period 1997–2001 the Preiļi district department has been manned by three employees carrying the title of "inspectors". Earlier they were six.

Four times a year an analysis is made (paid by the enterprise) on the emissions of Preiļu Siers into the river. The laboratory of the Daugavpils Regional Environmental Board makes the analysis, but in principle any approved laboratory can do the job. The analysis is used as a basis for settling the fees for pollution and emission. Daugavpils board can make agreements on postponement of payment on recommendation from the Preiļi inspectors. Fees and fines are formally set by the Daugavpils Regional Environmental Board, not by the county inspectors.

Main environmental problems locally according to district inspectors

According to the two inspectors the landfill question is single one environmental issue causing most controversy in Preiļi. The landfill is a problem because it is situated too close to the town. Inspectors told

that the landfill was planned some 30 years ago without proper investigations into the geological preconditions.⁴⁹

Since then the landfill has been overfilled. It is located close to a drinking water reservoir. In addition it is a problem that the administrative responsibility is changing. As soon as the responsible officer gets to know the issue, he/she is taken off the duty. Earlier the county (rajons) was responsible, now it is under the town authorities.

The second problem mentioned by the inspectors was created by the speedy dissolution of the collective farms. After the dissolution of the farms, nobody was there to take care of the remnant of chemicals hitherto used in the agricultural production.

A third problem is caused by problems getting away with the whey left over from the production of cheese. Earlier, it was told, the then existing collective farms used whey to feed their animals. If electricity gets cheaper, it was told, Preiļu Siers will be able to process their whey.

Another problem mentioned by the inspectors is the lack of instructions in how to carry out the duties indicated in the laws. Economic instruments are considered to be useful, but the inspectors are in need of a system for implementing them, they told. Twice a month they go to Daugavpils for training.

The problem of non-payment of fines was mentioned in a way that hinted at the non-dramatic character of the everyday activities of the inspectors. "People do not pay their fines. The reason is that they are unemployed". In other words, the day-to-day work of the inspectors consists in fighting illegal fishing and hunting in the forests.

The inspectors also felt overloaded by duties not under their professional competence, i.e. having to follow the cases of non-appliance to the environmental rules further than just pointing at the transgression. The inspectors have to prepare the cases for the court.

The fact that the relationship with Preiļu Siers sometimes is filled with conflict did not seem to be of great worry as "they in the end of the day comply". In the year 2000 Environmental Report from the Daugavpils board eight main environmental problems were listed for Preiļu district, three of them in Preiļu town. The problems were related to the landfill and oil spills from the cheese factory (Daugavpils 2001: 22-23).

⁴⁹ Conversation with two environmental officers in Preiļu 5 May 1998.

General picture of the way the environmental sector functions on the local level of Preiļi

Environmental protection is a clearly defined policy field with its own administrative structures from the Ministry of Environmental Protection and Regional Development via the regional boards down to the tiny district departments. The existing sector of environmental protection seems to have its strength on the issue of “nature” and the function of “control”. These findings are far from sensational. What is interesting, however, is how this fact influences on the capacity of the Latvian system of public administration in reaching the officially stated goals of using modern instruments of environmental protection.

8.4 The main polluter

Latvian single enterprise towns, like Preiļi, are smaller and less mono-industrial than their Russian counterparts. Nevertheless, like in Preiļi the dominating enterprises have been established as elements of state socialist industrialisation. They have had basically the same functions as the large Russian pulp and paper mills mentioned above, social, cultural and infrastructural. As in Russia social and cultural tasks, including cheap housing, have been transferred to the local self-government. And as in Russia drinking water, sewage, waste water and heating are services still in enterprise hand, now converted into a commodity to be sold.

8.4.1 Industrial re-structuring in Latvia

The role of industry in post-1991 Latvia differs from that of Russia, among others in the role it has played in national rhetoric. True, both Russian and Latvian nationalists have been eager to criticise the allegedly devastating effects of industrialism not only on nature but culture as well, the rapid development of industry in Russia still evokes some pride. In Latvia industry has rhetorically been described as one deplorable side-effect of Soviet occupation. It has been seen more as a way of subjugating Latvia (by making its economy dependent upon spare parts and buyers in other parts of the Soviet realm and by employing large groups of non-Latvian immigrants) than as an agent of modernisation and prosperity. Upon the re-establishment of Latvian independence in 1991 some of Latvia's problems were due to its industrial structure. For instance, as pointed at by Segliņš and Vanaga (1994:4) Latvia's post-Soviet industry lacked a strong undergrowth of smaller enterprises. Large enterprises

employing more than 200 people dominated. Furthermore, tight integration with the rest of the former Soviet Union resulted in Latvia having to import 90 percent of primary energy resources and up to 50 percent of electrical energy. Practically all heavy machinery, production components; final products were designed for post-Soviet purchasers.

Nevertheless, it seems that the enterprises of Latvia got more time to re-orient themselves into profit-making entities than their Russian counterparts had. The privatisation went more gradually than in Russia.

As for the cheese factory of Preiļi, it belongs to the food-processing industry which had a high status since it had roots in the first decades of Latvian statehood between the world wars.

8.4.2 The cheese factory in Preiļi

Just like the Russian enterprise belonged to the major industrial branch in Northwest Russia, the Latvian enterprise – Preiļi Cheese (Preiļu siers) formed part of the food industry, which is one of Latvia's core activities besides transit of goods to and from Russia via Latvia's harbours. Locally the cheese factory plays an important role since it buys huge amounts of milk from the farmers, a social group that otherwise have belonged to the definite losers from Latvian restructuring. Out of the town's 9 400 inhabitants 400 people worked for the enterprise in the late Soviet times. In 1995 only 80 were left, but the enterprise recovered and in 1997 it employed altogether 250 people. In 2000 the number of employees had risen to 384.⁵⁰ Preiļi Cheese is the largest cheese producer in Latvia.

When Preiļi Cheese was established in 1972, it was subordinate to the Ministry of Agriculture at republic, not Union level. It regularly produced 2200 tons of cheese a year. The cheese producing equipment was of Danish origin. In 1981 the equipment was modernised, and again a Danish firm was used. Their automatic cheese producing equipment was installed.

In 1994 the factory was privatised and made into a share-holding company. At that time Latvia carried out privatisation along Czech lines which included the use of "privatisation certificates". Both farmers delivering milk to the factory and factory workers changed their certificates into shares. At the outset the enterprise was owned 48

⁵⁰ See: Baltiiskii Kurs no. 17/2000 "Chedderizatsiia po-latgal'skii".

percent by farmers and 32 percent by workers. Investors controlled 20 percent.

After the collapse of the Soviet Union, the enterprise lacked contacts abroad to establish new customers. However, by improving its technology Preiļu siera now exports 90 percent of its production, mostly to well renowned cheese producing countries of North-Western Europe. Most of the cheese produced is cheddar. The cheese is exported in big "blocks" and packed abroad. Two types of cheese, Cheddar and "Baltija", are made. In addition the factory makes milk (3.2 %) and skimmed milk in cartons, sour cream and double cream in cartons, cottage cheese and butter in packages of 200 grams.

The local cheese factory is polluting far less than the Russian pulp and paper mill presented in the previous chapter. The factory has two permits, one for water use and another for emissions into the air.

The major environmental problem caused by the cheese factory is the emission of whey into the local river. Earlier the whey was made into lactose (sold to Russia and the Ukraine), and still the equipment is intact. The problem is cost-efficiency. It is costly to produce lactose from whey. Now much of the whey is given to farmers as animal food.

Another environmental problem is created by emissions from the enterprise boiler house (twenty percent of flats in the town are serviced by the Cheese Factory's boiler house). The factory wants to rebuild the heater to enable it not only to produce hot water, but electricity as well. The factory does not exceed emission limits.

The dominating position of the cheese factory manifests itself not so much in its size as in its hold of communal infrastructure. The cheese factory provides heating and waste water treatment. This is also one of the issues that bring rivalry to the fore. The local self-government and municipal administration stands against the cheese factory.

The situation in Preiļi is illustrative for the situation in hundreds of towns all over the former Soviet Union. An all-out division of labour, or differentiation of functions, is going on between various institutions. In Preiļi the most controversial issue is connected to the fact that the Cheese factory is able to provide parts of the town's population with services that otherwise are considered municipal, and to a lower price. Being in command of infrastructure for heating flats, the enterprises would like to do that as a part of its commercial profile. This is a seemingly paradoxical situation in which the state socialist legacy (enterprise with "municipal" infrastructure in its own hands)

enables thrusts for comprehensive privatisation, and "marginalisation" of the municipal sphere.

Twenty percent of flats in Preiļi are serviced by the Cheese Factory's boiler house. The houses serviced by the enterprise boiler are charged less than the municipally charged houses. There are meters/counters in these houses, which means that people must pay according to consumption. Just like in the case of the wastewater treatment plant the enterprise director would like to play a more important role in providing infrastructure services to the town population⁵¹. The director emphasised the general disagreements between town and enterprise on the development of the town. One example of this is a decision by the town council "that the inhabitants do not need hot water". It is difficult for employees to work normally when they do not have hot water and when they have problems paying the water and heating bill. Preiļu Siers can offer hot water and heating cheaper than the town, the director claimed.

Preiļu Siers has its own wastewater treatment plant that has a capacity to clean more than the industrial waste and the 1/4 of the household wastewater it now cleans. Until 1 December 1997 Preiļu Siers treated the wastewater of the whole town. Then a municipal plant took over the treatment of household waste water. Since then tiny Preiļi has got two separate waste water treatment plants situated next to each other.

The new wastewater treatment plant can clean 1300 m³, and can be expanded to treat 8500 m³. There are only two wastewater treatment plants of that kind in Latvia. The plant serves the central parts of town, whereas the plant belonging to the cheese factory still covers one fourth of the households.

The wastewater treatment plant got a favourable financing since it was a part of the environmental infrastructure programme «800 plus».

The new wastewater treatment plant has been financed by Environmental Fund and directly from the state budget. In 1997 the town council decided to spend all the money from the natural resource tax (the moderate sum of 10.000 Ls) on the wastewater treatment plant. The idea to build it was, however, much older. The decision to build a municipal waste water treatment plant stems from 1975.

In Preiļi interlocutors often claim unofficially that the wastewater situation was not that bad, and that a new wastewater treatment plant

⁵¹ Interview with Mr. Jāzeps Šņepsts, director of Preiļu Siers in Preiļi 7 May 1998

is superfluous. Much was cleaned by the Preiļu Siers plant and the rest went into a lagoon and was basically cleaned there. On the other hand a modern wastewater treatment plant with large capacity is an asset when trying to attract new capital to exiting enterprises, or building new ones.

The enterprise director would have liked to treat all waste water in the enterprise treatment plant. Money should have been spent of modernising that one in stead of stabling a brand new plant. He called the whole project plus the new municipal boiler-house “gigantomania”⁵². On the other hand, the town authorities (mayor Ivanovs) would like to prevent a *private* monopoly on treatment of wastewater, which could have become a result of modernising the Preiļu Siers plant instead of building a new, municipal one. Mayor Ivanovs told: "We wanted to avoid a private monopoly that would have made it possible for the commercial owner to increase "prices"⁵³.

Preiļu Siers is about to start producing electric energy. For this purpose it would be necessary to be connected to the gas line. In this case, the enterprise would be able to provide the whole town with heating.

The rivalries between the cheese factory and the municipality are of interest to this study for two main reasons. First, the rivalry shows that differentiation, or demarcation, is going on. Just like in the Russian case town political power in the Latvian town was not monopolised by the dominating enterprise. In fact, a sharp rivalry went on between the enterprise director and the mayor, who belonged to political parties that were competing at national level.

Second, the rivalry is over the ownership of the town’s major polluters, liable to pay taxes, fees and fines, in short being target groups.

⁵² Interview with Mr. Jāzeps Šņepsts, director of Preiļu Siers in Preiļi 7 May 1998

⁵³ Interview with mayor Vladimirs Ivanovs, in Preiļi 4 and 5 May 1998.

8.5 Local self-government

8.5.1 Development of local self-government in Latvia

The Law on local self-government is effective from June 1994. At the outset of this study (which covers the period 1997 – 2001) local self-government rode the wave rhetorically in Latvia. Nevertheless, the local self-government sector itself complained that it lost in influence, referring to figures that indicated a decrease in the share of the local self-government of the total state budget has decreased from 24 percent to 15.6 percent from 1994 to 1997.⁵⁴

Interestingly, local self-government matters in Latvia are dealt with by the Ministry of Environmental Protection and Regional Development.

The ministry has a special unit for local self-government - the Administration Unit of Local Government Affairs - employing 20 officers.⁵⁵ There is a local self-government lobby in Latvia, first of all represented by the Union of Local Self-Government in Latvia. In 1997 the Union represented about 50 percent of the local self-governments in Latvia. In 2001 almost all self-governments were members.

8.5.2 Local self-government's role in environmental protection

Local self-government in Latvia is responsible for:

- environment
- gas
- communication
- land reform (i.e. land privatisation)
- sports
- schools, education
- health

⁵⁴ Interview with leader of the Regional development department of the Union of local self-government in Latvia Ms. Ligita Začesta and co-ordinator of foreign affairs Ms Dace Ozola, Riga, 3 October 1997.

⁵⁵ Conversation with Astra Vilmīte, officer in the Administration Unit of Local Government Affairs, 30 September 1997.

- social support
- business development
- the census rolls.

At district level/republican cities there is a Department for regional planning and development. In big cities (Riga, Jurmala, Ventspils) there are special environmental departments. In other large towns one person, or a small unit, is responsible for environment. In practice environment is not a major issue of local self-government. Municipalities get a part of the tax for use of natural resources through the Environmental Fund.

8.5.3 Local self-government in Preiļi as a policy actor

Local self-government is not a strong policy actor. There is no commission for environmental issues under the local self-government, but there is a commission on town planning. The commission on “municipal household” is central to the environmentally related issues dealt with by the three municipal enterprises. A member of the council leads the commissions, but specialists also take part.

8.5.4 Local self-government as a target group

The local self-government has had fundamental tasks in environmental protection, not least since it is a polluter (target group) on the same level as the cheese factory through its municipal enterprises. There are three municipal enterprises in town responsible for servicing the housing (housing stock), for heating, and for water supply and sewage company.

Just like in other towns of Latvia the municipal enterprises of Preiļi have undergone a transformation from being integrated parts of the municipal administration to commercial units dependent on their own incomes. Their ties to the municipality are secured by their subordination to the senior executive officer of the town.

8.6 The NEPIs in use

8.6.1 Market-based economic instruments in Preiļi

In Latvia, like in Russia, the main *economic* instruments are derived from the system of natural resource taxes (laws of 1991 and 1995). These taxes are ear-marked for environmental purposes and it is managed by the Latvian Environmental Protection Fund (the Environmental Fund). Municipalities get a share of the money collected as nature resource tax. Every year a 2 to 2.5 million Latvian lat (3.2 – 4 million euro) is transferred to the municipalities for environmental purposes whereas 7.5 to 8.5 million lats (12 – 13.5 million euro) are transferred to the central state level (Ministry 2002:44).

Natural resource taxes are not only to be paid for extraction and emissions, but also for consumption, and other activities (or lack of activities) harmful to the environment. Taxes paid for use that exceeds the limits are three times higher, and all end up in the State Environmental Fund. The same goes for taxes paid for trade or import of goods harmful to the environment, and for fines and delay payments (Kudreņickis, 1997:16).

Just like Russia the Latvian Environmental Fund is a major institution for the use of economic mechanisms in environmental protection. The Environmental Fund is envisaged as a major tool in changing polluter behaviour, both negatively by charging use of nature, and positively by re-diverting funds gathered through taxation to environmental activities by the polluting enterprises.

The law on natural resource taxes (1996) sets tax relieves for polluters who implement environmental improvements of their own activities. This opens up for the use of another type of environmental policy instruments – the *agreement*. Environmental authorities and the polluter may set up agreements on reducing taxes if the polluter agrees on environmental investments, or improvements, like re-cycling of harmful waste.

In general Latvia's system of environmental protection has gone through a massive harmonisation with European Union requirements.

The use of economic instruments in Preiļi

Economic instruments are mostly in the hands of state institutions or units of de-concentrated state power, i.e. the regional boards for

environmental protection. In practice, it seems as the task of the three inspectors (local representatives of the regional board) is primarily to carry out low-level control of fishermen and hunters. However, they also control polluters, industrial enterprises as well enterprises for communal infrastructure. Four times a year an analysis of emissions from the cheese factory is made (paid by the factory itself). The laboratory of the regional board makes the analysis, but in principle any approved laboratory can do the job. The analysis is used by the regional board as a basis for settling the fees for pollution and nature resource use.⁵⁶

Nature resource taxes bring regularly an approximate annual 10 000 Latvian lats (5 000 euro) to the Preiļi town budget through the Environmental Fund. This amounts to 1.2 percent of the total budget of the town, and does not bring the income that would enable large investments in environmental friendly projects.

Just like in most other small towns of Latvia, the Environmental Fund is not widely known among municipal leaders in our case town. Environmental Fund "activities are not visible in Preiļi", and "some of the leaders of the municipal enterprises do not know about the existence of the Fund" it is concluded in one report made as a part of the project behind this thesis (Ernšteins, Builevics and Sīle, 1999:6).

The three municipal enterprises – providing water, energy and waste disposal – pay almost the same amount in nature resource taxes (see table).

Table 8.2 *Natural resource tax paid by municipal enterprises (in lats)*

Municipal enterprise		1997	1998	1999
Atvars (water)	Tax paid	6,603	5,089	4,197
	Total budget	112,297	114,316	109,229
Siltums (energy)	Tax paid	3,557	1,760	1,564
	Total budget	426,000	367,000	414,600
Saimnieks (waste)	Tax paid	1,500	1,795	1,743
	Total budget	136,000	190,546	228,000

(Source: Silvija Sīle, Cesams – University of Latvia)

⁵⁶ Interview with Pavel Kacar', head of the Daugavpils Regional Environmental Board, 6 May 1998, and his vice-head, Inta Hahile, 11 May 1998. Conversation with two of the environmental officers in Preiļi 5 May 1998.

As for the cheese factory, it paid nature resource taxes (including payments for the use of clean underground water and emissions into air and waste water) for 8055 Latvian lats in 1997, 6603 in 1998 and 5967 in 1999. Compared to the figures for the municipal enterprises, the figures for the cheese factory show that municipal infrastructure is using more natural resources than cheese production. This is the more so when the fact that the cheese factory in fact ran parts of the infrastructure that otherwise would have been ran by the municipal enterprises. This was the case for one third of the waste water of the town (until 1997 the factory treated 100 percent of the waste water).

Table 8.3 *Nature resource tax paid by the cheese enterprise and its turnover (in Latvian lats)*

Year	Amount paid	Turnover
1996	7752	2 197 623
1997	8055	3 035 362
1998	6603	3 045 536

(Source: Silvija Sīle, Cesams – University of Latvia)

Summing up

Lack of differentiation does not seem to create problems for the functioning of economic instruments. On the other hand, economic instruments are not much emphasised by the regional and local environmental officers. There are no occurrences of playing with economic instruments neither with the cheese factory nor the municipal polluters.

8.7 The use of voluntary agreements

The environmental board applies two different approaches when levying fines, a formal legal-economic and a more informal one that makes use of communication in order to reach agreements on improving the environmental behaviour (Ernšteins, Builevics & Sīle 1999).

When applying the *formal approach* the regional environmental board levies fines against individuals and private enterprises after the fact of the infliction on the environment, and also determines the deadline till which the consequences should be eliminated. The fines are levied at once, without warning. If injunctions are not complied with, the fines are repeated and the deadline for compliance becomes shorter. In one

case the Preiļi Cheese Factory had to put in order their fuel system because of leakage and air pollution.

In a comparatively short time – one year – making use of a combination of regular inspection, control, and small fines the environmental board in Daugavpils made the enterprise halt leakage and air pollution. However, since fines are very small – in the case of the cheese factory 100 to 200 Latvian lats (175 to 350 euro) per transgression – few changes of a substantial character take place in the environmental behaviour of the polluter.

The *non-formal interactive approach* makes use of communication as an instrument. The Daugavpils Regional Environmental Board applies this with Preiļi town and the municipal enterprises of the town (these enterprises' equity capital is owned 100 percent by the town). In the case of the municipal enterprises the board applies a different strategy. The fines are not enforced as long as sufficient improvements are envisaged in a municipal development plan. The plans may sometimes be on long term. The fines are not repeated in case the activities for the improvement of the situation are carried out in accordance with the plan that has been agreed upon on beforehand.

By applying the non-formal interactive approach the regional environmental board does not merely *force* the town and its enterprises to compliance, but invites them to a dialogue to find practical and readily feasible steps to be taken that might result in the town being actually involved in solving its own environmental problems. Furthermore, this approach prevents conflicts becoming “eternal”, which under any circumstance would mean that the environmental improvements would be halted. It is, however, not written explicitly anywhere that the regional environmental boards ought to apply a non-formal, communicative approach.

Summing up

It seems that the environmental authorities are more easily making agreement with municipal enterprises than with privatised ones. This may be because patterns of interaction based on deals – called fiduciary law elsewhere in this thesis – have survived in the public sector whereas relations between the public and the private sectors are less based on established trust.

8.8 The use of informational devices

As noted in the chapter on the Russian case town, environmental information campaigns, general or directed at specific actors, clearly defend their place in the new environmental toolkit. NEPIs are knowledge-intensive.

Information about environmental protection is treated seriously by the regional board in Daugavpils. Measures in this field are reported in the annual reports. For instance in 2000 the board gave no less than 1905 consultations, went through 256 complaints, gave 81 lectures, issued 95 press releases, and performed 15 times on TV and radio (Daugavpils 2001:90).

A lot of environmental consciousness-raising activities have been going on in Latvian municipalities since the early 1990s thanks to international co-operation, Agenda 21 and the like. Potential local environmental groups have been encouraged to take action, not least by foreign fund-raisers. In order to attract heavy actors, notably the polluters, informational campaigns have been combined with solid funding. In Latvia this has been the case for two big programmes "800 plus" and "500 minus". The former aimed to increase the number of sewage treatment plants and water supply systems, whereas the latter was a programme to reduce the number of landfills in Latvia. The funding envisioned in these programmes made it easier to bring environmental issues to the fore. The programmes were clearly combinations of economic instruments and informational devices.

Attempts at bringing actors together in order to develop a common understanding of basic environmental challenges have been made, but the Latvian town did not have anything similar to the local environmental programme of the Russian town. However, Latvia's well-developed interface with the rest of Northern Europe partly compensated for this in the case of the town studied here. Seminars, workshops and trips abroad initiated by foreign institutions brought local actors together and strengthened knowledge bases.

Example: The Local Waste Plan

The use of information in the interplay between policy actor and foreign "donors" is illustrated by the way Preiļi got its Local Waste Plan. In connection to a two weeks training seminar in Sweden one representative from Preiļi was invited to take part. One of the requirements for taking part was that a "Waste Plan" was presented.

The task was assigned to Town Architect Anita Rumbiņa⁵⁷. The plan was characterised as "realistic" by the director of "Saimnieks"⁵⁸. However, it does not carry any official stamps and has neither been approved nor discussed in the local Dome. The plan presents a new approach to waste management, among others by pointing at the need for recultivation.

The case of a local waste plan for the town is illustrative for the relation between foreign actors (donors) and local level decision-making in the "recipient" country. Local actors are urged by foreign actors to take action (make a plan). It is doubtful that the Waste Plan would have come into the world in 1998 were it not for the requirement of the seminar organisers. The local underpinnings and pressure that would have made a policy plan for waste treatment sustainable, therefore, is absent. And certainly the plan as presented at the seminar still was very sketchy. Therefore there is a danger that this kind of externally initiated activities will end up as a waste of effort, and a mere item in the municipal archives, rather than a measure to create interaction between different actors to the benefit of the environment. On the other hand the invitation to present a plan, if well rooted in the local decision-making structure or not, may provide the seeds for further activities. In the latter case the plan, which was originally meant to be presented at a seminar abroad, becomes an item on the agenda of the local self-government council. Eventually the plan may be financed and implemented.

Summing up

The pre-conditions for the development of an epistemic community are promising in Latvia, not least because of the strong presence of external actors, who "sell" their best ideas. The regional environmental board pays attention to its role as promoter of environmental information and knowledge.

⁵⁷ See: Preiļu pilsētas atkritumu apsaimniekošanas plāns (with a summary in English).

⁵⁸ For language reasons no one from "Saimnieks" went to the seminar. Instead the chief town architect went despite she has no professional duties connected to waste management. In this case, however, the person who went followed up her duties although they were outside her own field of work. The effects have been summed up as positive by the mayor, who told that a Plan for Municipal Services resulted from the travel to Sweden.

8.9 Summing up on Preiļi

In this chapter the operation of environmental instruments has been analysed by looking into the way they work in one Latvian industrial town. The Latvian case is marked by weak regional and local use of NEPIs. Could this be explained through the method prescribed here? Could a configurational logic be discerned by asking how the instruments did interact with the surroundings, like institutions, path dependencies, social structures, the larger context?

The economic NEPIs and the assumption of weak differentiation

Economic instruments seemed to play a negligible role at regional and local level although money was gathered and ended up in the Environmental Fund, which was able to finance important environmental projects. There are no occurrences of playing with economic instruments neither with the cheese factory nor the municipal polluters. There is, however, no evidence that this is due to lack of demarcation between the policy actor and target groups. The policy actor is a de-concentrated state body localised in a far bigger, neighbouring town.

Although Latvian industrial branches are deeply involved in politics, even party politics, and the director of the Cheese Factory is a prominent member of one of the leading parties, this has not played any role here. Rather a reason why economic instruments are not used actively may be that the employees in the environmental board are trained as inspectors and seem to perceive themselves as that. Through their routine practices they focus on control, which in a NEPI way of thinking would be a necessary step for making use of economic instruments, but not the goal.

Another reason may be that the level of pollution in Preiļi simply is too low to make the use of economic instruments worthwhile. Connected to that is the fact that most environmental activities in Preiļi consisted in new investments, to the waste water treatment plant and the landfill. Both were connected to large national programmes heavily underpinned by foreign donors and international organisations. The larger context of Latvia's tight integration with mainstreams of the international community on all major issues (except perhaps for the treatment of non-titular inhabitants) makes for this fact.

In the period of study there was a rivalry between the factory and the municipal authorities. In other words the merging of roles that often

takes place in single-enterprise towns was not prevalent. This fact was not very significant as the local self-government has little say in environmental matters concerning the activities of the cheese factory, except for the issues pertaining to communal infrastructure, some of which is still in the hands of the factory.

Voluntary agreements and the obstacles to non-hierarchical ways of interacting

Since there was no use of economic instruments beyond a mere collection of fees and fines, voluntary agreements in the shape of e.g. debt swapping could not be examined. Nevertheless, arrangements of a voluntary character were observed, in particular between environmental authorities and municipal enterprises that seemed to be invited to that type of interaction more frequently than other polluters.

Here, two elements of the past compete, but it seems that that the tendency to hierarchical behaviour (inspection, control) is less strong than the willingness to build on trust between officers in different sectors of public administration (state environmental authorities and municipal household enterprises).

The amount of money extracted from the polluter is, however, small, and hardly alone able to make polluters change behaviour. Environmental authorities – the regional environmental board – makes use of agreements where the polluter promises to improve environmental behaviour as an alternative to straight-forward control followed up by charges.

Epistemic community and the use of environmental programmes

In the period of study Latvia aimed at international – i.e. EU – standards for its environmental protection system. NEPIs had already been introduced. Economic instruments including an Environmental Fund had been set in operation. Various activities aiming at bringing actors together in order to solve environmental problems were initiated by the environmental authorities, often in co-operation with international and foreign institutions. Therefore, the pre-conditions of an epistemic community are present in Latvia, but then very much thanks to external actors. The regional environmental board pays attention to its role as promoter of environmental information and knowledge.

In Preiļi, we saw that offers by foreign actors made local authorities undertake actions that they otherwise would not have taken, at least not that early. This was the case with the waste plan that brought new aspects to the already very hot waste issue. The plan brought together

local actors and made them discuss waste according to Swedish ideas about the issue. This may have contributed to the strengthening of the local knowledge-base, but again thanks to the larger context of Latvia's outward-looking environmental policy strategies. Local roots for the activities are shallow, though.

8.10 General conclusion on the findings from Koriashma and Preiļi

It seems that the Latvian case town was more exposed to external processes, like huge national programmes and international co-operation than the Russian case town, which relied more on internal, local processes of communication, agreements and not too-hierarchical interaction with polluters. Although having been subject to rough re-organisation and reduction of influence lately the Russian environmental sector, as it appears at close hand and in a local setting, may have struck roots. This way the committees have been able to position themselves in such a way that they may increase their real influence when Russia's political and economic situation stabilises.

This is thanks to its ability at regional and local level to make use of agreements with polluters and to set up environmental programmes involving various actors. Economic instruments, on their hand, did not play an important role. There is, however, one exception. The money gathered in the Ekofond enabled environmental programmes deal with real issues that can be financed, which brings various actors together similar to the principles behind NEPIs.

Nevertheless, one should notice that the small breakthroughs that have been discernible in Russia have come "from below". They are the result of intense work and persistence on the part of the local committee of environment. This is unlike the situation in Latvia, where external factors, more precisely the wish to harmonise with EU regulations, that is the main factor behind the position of the environmental sector, that (among others) therefore enjoys a far stronger position in Latvia than in Russia.

Russian NEPIs seemingly function low-keyed making use of local actors' old habits of communicating informally and making agreements. The institutional lag – referred to as path dependency above – did not render the introduction of NEPIs impossible. As envisaged in the "path contingency" perspective reforms basing themselves on indirect methods, like NEPIs, would be vulnerable to

institutional legacies. In the Russian town presented in this paper, the relative success may be explained by the environmental authorities' ability to recognise and make use of institutional legacies.

This is not what we expected to see at the outset of the study, but a kind of insight we opened up for through our choice of method.

9 Conclusion

This thesis has highlighted what happens when new policy instruments have been transposed from one (lending) into a new (borrowing) setting. Focus has been on the relations between the instrument and the setting in which it was set to operate. It was assumed that the instruments' genesis in the lending setting differed from that of the borrowing setting. Furthermore, it was expected that the instrument's institutional backing in the two settings differed. And finally, it was believed that these broadly defined institutions were key factors for the success or failure of the transposed policy instruments.

The so-called NEPIs (new environmental policy instruments) were picked as the specific policy instruments to investigate further, and the settings were post-Soviet Russia and Latvia. NEPIs are well-suited for the purpose of sharpening the analytical contrast between the setting in an assumedly advanced "West" and that of the assumedly different political and administrative structure in the post-socialist "East". NEPIs have the capacity of bringing such contrasts to the fore since they are true-born children of the shift to "governance" in general and "ecological modernisation" in particular, both shifts considered archetypical of the most advanced parts of the "West" in the 1990s and later.

Policy transposition consists in a long chain of decisions and processes. This thesis has focused on the end-point, which is the policy instrument's actual functioning at local level in the borrowing setting. It is at this level that the thesis develops an answer to the two main questions asked: *How* do the instruments interact with the surrounding institutions and actors? *Why* do instruments get rejected in some cases, *why* do they get in mesh with the surroundings in other cases?

Method

In order to answer the research question put forward in this thesis a need occurs for close-up perspectives to throw light on the study

object's inter-relatedness to its surroundings. This is what case study methodology can offer. Case studies are being used for a variety of purposes and within several epistemological currents. In this thesis case study methodology was used to observe how theoretically based expectations fared under concretely specified circumstances in which the case is embedded.

The main logic of the method as used here has been generalisation through comparing an empirically based pattern with a predicted one. This was done twice (Koriazhma and Preiļi), and the two cases were treated as separate studies. The differences between the two settings were used contrastively to throw light back on each of the cases, but did not form the basis of a comparative design.

Data collection was open-ended as for the type of data made use of. Relevant data were those that were believed to be conducive to understanding how new environmental policy instruments are being used by environmental authorities and (potential) polluters, and why they function alternatively do not function in their actual setting. In other words, the thesis has aimed at identifying causes, more precisely the actual configuration of circumstances under which a cause (e.g. a policy instrument) leads to an effect.

Theoretical foundations

In order to answer the questions on how the NEPIs function and why, a need emerges for in-depth insight into the institutional set-up surrounding the new instrument in its setting of origin as well as of its setting of destination. From what can such insight be drawn? The answer depends on what the countries of origin and destination are, and on what policy or policy instrument which is transposed. In the case of this thesis insight in the institutional surroundings of the *original setting* was taken from the literature on governance and ecological modernisation. As for the institutional realities in the *receiving setting* the huge literature on Russia, Latvia, state socialism and transition as well as the literature on the development of the Soviet and post-Soviet policy field of environmental protection is of value, not least since Soviet and post-Soviet studies is an arena where several schools of thought clash.

The thesis' assumptions are informed by the theoretical perspectives opened up by institutionalism. Institutional perspectives throw light on the institutional context's impact on the core phenomenon of study, and enable an identification of the configuration of elements that may explain how NEPIs function, alternatively do not function. This thesis assumed from the outset that "institutionalised patterns of

expectations, language habits, routines, rules and organisations” as well as “formal or informal procedures, routines, norms and conventions” did exist in Russia and Latvia, and in the actual site towns. They were expected to have an impact on the ways new policy instruments were received in the borrowing setting.

Furthermore, the institutional set-up was also relevant for the understanding of the genesis of the new policy instruments. After all, they had emerged under specific circumstances in the lending setting. They had been born in a specific institutional surrounding and were sustained by it. Could the institutional surrounding in the borrowing setting offer a similar (or sufficient) backing? These questions bring institutional perspectives into the study of policy transposition. This has been the leitmotif of this thesis.

The assumptions on the reception of the NEPIs

The three main assumptions on how NEPIs would fare in post-Soviet Russia and Latvia were elaborated on the background of a perusal of the literature on ecological modernisation on one hand, and post-Soviet societies on the other. Three major preconditions seemed to underpin NEPIs in the settings of origin. These were a) differentiation b) familiarity with non-hierarchical interaction, and c) existence of an epistemic community. These were all preconditions that would be expected to be weakly present in post-Soviet societies.

What did we find in Koriashma and Preiļi?

In practice, what are the relations between NEPIs and the settings in the two sites studied? The settings are characterised by their institutions. These may among others be patterns of expectations, rules, organisations, language habits, formal and informal procedures, routines, norms and conventions and ideas about relevant knowledge.

Differentiation

As repeated throughout this thesis, in order to make environmental policy instruments function a certain differentiation between actors must have taken place. This point held to be particularly critical in post-socialist settings where the past was marked by a blurring of boundaries between political and economic actors, since enterprises did belong to industrial branch ministries. This supposedly left behind a wider context with a too weak differentiation to make economic instruments work.

In the sites of single-enterprise towns the problem was expected to be of particular gravity. Here, the boundaries between the dominating

enterprise and public authorities were expected to be indistinct. And in fact, both the Russian pulp and paper mill and the Latvian cheese factory belonged to strong branches of power (including political parties) that still prevail in the post-Soviet settings. Furthermore, the enterprises have close relations to the administrative structures.

In Koriashma, the study registered that there was a considerable exchange of leading cadres between the pulp and paper mill and the local self-government as well as the environmental committee. The close connection between environmental inspectors and the professionals working in the pulp and paper mill could be expected to hold back differentiation. The two sides shared educational backgrounds as well as a background as colleagues, but this did not seem to hamper the ability to make use of control mechanisms.

The study showed that both in Russia and Latvia control and inspection belonged to the “institutional expectations”. In fact, the importance attached to control and inspection and the frequent references to legal provisions were striking features of the Russian as well as the Latvian policy sector of environmental protection as they appeared through field work. These features apply not only for the environmental sector, but is a general feature of Russian public administration, and nowadays less so in Latvia.

For students of NEPIs the focus on control and inspection may seem “old-fashioned”, and “traditional”, in short a kind of “pre-NEPI” behaviour. NEPIs go beyond control and make use of deliberations, development of common environmental concern and the like. There is, however, reason to look into the circumstances that make use of NEPI-type communication efficient. Among the main pre-conditions, of course, is that the role and functions of the policy actor (environmental authorities) and the target group (polluter) has been clarified as being separate. Moreover, NEPIs require some sort of shared understanding of the contents of environmental protection between authorities and polluters. When these preconditions are not there, simple control is a substitute that secures the basic enforcement of differentiation. Besides, also NEPIs base themselves on control, fines and fees as more or less hidden threat. In the Russian and Latvian realities, then, control as an institutional expectation is an asset to be made use of by the environmental sector. It is more than an old-fashioned remnant from the past.

The focus on control and the blurred distinction between political and economic actors are functionally counterbalancing institutions. They both have deep roots in the past. The present organisational set-up of

the environmental sector in Russia and Latvia, however, are institutions that result from more recent decisions.

Interestingly, tendencies both at site level and in the wider national context in Russia during the period of time covered by the study went in the direction of *weaker* differentiation. Firstly, in 2000 the two policy sectors of environmental protection and nature resource use (traditionally the main adversary of the environmental protection sector) were merged. This has been considered a backlash for environmental protection.

Secondly, changes in the organisational affiliation of the local environmental control body in Russia changed in a way that could harm the necessary insulation of the policy actor from the target group. Environmental instruments used to be in the hands of the oblast level Ecological Committee in the first part of the period covered by the study. The oblast committee had its own de-concentrated field office at municipal level. Much of this office's assertiveness was explained by its being a state organ and thus expectedly not to be too close to the dominating enterprise to exert its functions. Then, nevertheless, the office was closed down, but an inspector under the oblast committee stayed. The municipality established its own environmental committee. Given the municipality's dependence on the pulp and paper mill, and frequent exchange of leading cadres between the two entities, municipalisation was not seen as a step towards differentiation.

Thirdly, the eco-funds that used to be mainly controlled by environmental officers came under the control of elected politicians. Even if eco-funds at times had been used for purposes other than strictly environmental protection this tendency might speed up. Elected politicians are not necessarily more prone to challenge dominating industries than state representatives of a policy sector of environmental protection would be.

In other words, in Russia lack of differentiation was not solely a problem rooted in the past and in deeply structured features of the politico-administrative system. It was also a result of proximate factors, i.e. recent decisions that were made despite the generally acknowledged need to separate economic and political decision-making.

On the other hand control functions including fining actually *are* taken care of by the regional environmental committee. This is also the case in Latvia, where environmental inspectors are employed by de-

concentrated state environmental boards, located in the regional urban centres, like Talsi and Daugavpils.

Non-hierarchical interaction

The ability for authorities and polluters to enter into non-hierarchical interaction is important for NEPIs, and perhaps most so for the voluntary agreements. The voluntary agreements focused on in this thesis are closely linked to economic instruments. In Russia and Latvia at local (and regional) level voluntary environmental agreements are made through debt swapping arrangements forming part of the eco-fund mode of operation. Debts are waived on condition that the polluter takes environmental measures for an equivalent sum.

The study showed that despite the insistence on control and formalities, informal procedures and habits also play a role. The voluntary agreement is a NEPI that is ready to interact with the institutional realities of post-Soviet Russia and Latvia, i.e. the institutions of “fiduciary law” and “informal, but binding agreements”. Bosses in the public sector and industrial enterprises are used to coming to terms in informal, but committing agreements. The eco-fund, which plays an important role in both Russia and Latvia, can draw on these habits.

At local level, however, eco-funds did play less of a role in Latvia than in Russia, whereas they were important for the financing of larger projects at regional and national level. The regional environmental board, however, made active use of voluntary agreements, primarily with municipal enterprises.

Epistemic community

Information and shared knowledge are important elements within the NEPI way of thinking. The study showed that knowledge was easily shared between the policy actor and the polluter. Inspectors and technological staff in the enterprise’s environmental departments have the same educational backgrounds. Quite often they have been colleagues at the enterprise. Also higher municipal officers have their background from the dominating enterprise although not necessarily from the environmental department.

In the study, the local environmental agreements were picked as the main informational NEPI. However, even the activities related to the eco-fund had to do with knowledge and information. Especially in the Russian site – Koriashma – the eco-fund was an important “environmental meeting-place” in addition to its main function as an

economic instrument. The fact that the environmental issue is linked to real money at local level is most probably conducive to the development of an environmental advocacy coalition locally. In Latvia this process took place at a regional and national level.

Soviet, and post-Soviet, environmental protection is marked by a remarkably one-sided emphasis on natural science and technical skills. Several factors contribute to narrowing the scope of what is considered to be relevant knowledge within Russian and Latvian environmental protection. Partly this is a result of the overall emphasis on technical skills and natural science which characterised Soviet modernisation. Partly, it can be explained by the weakness of human and social sciences in Soviet and post-Soviet academic structures, and in particular the underdevelopment of these sciences' applied aspects.

There are also more specific factors within the sector of environmental protection that help explain the narrowness of the Russian and Latvian environmental knowledge-base. In Soviet times, and still in the years 1997-2001, much of the environmental monitoring was taken care of by policy sectors other than that of environmental protection, like the sectors of hydro-meteorology and sanitary-epidemiology. The latter applies an anthropocentric, medical approach.

The environmental sector was established long after meteorologists and epidemiologists started to work with the issue, and the environmental sector immediately found itself a separate identity in a nature-centred approach. Most of its employees considered themselves to be "ecologists", a conviction that still prevails in "language habits". For instance, interlocutors contributing during this thesis' field work quite often referred to the "ecological inspectors". In Russia, the official name of the state committee has referred to "nature" and "ecology".

Just like the insistence on "control" referred to above, the focus on ecology in stead of environmental protection, may seem old-fashioned. Just as old-fashioned is the striking under-use of human and social sciences, that could have contributed to the sector's ability to reflect over impacts as experienced by human beings and not only effects on nature, or to understand instrument-actor relations. After all, environmental control is about human action.

On the other hand, just like focus on "control" in the given situation in Russia and Latvia can be seen as a major asset in the hands of the environmental sector, the strict references to "non-nonsense", incontestable "facts" drawn from applied natural science should not be under-estimated. It might not be a good idea to downgrade this type of

knowledge before the more reflective, policy applicable, to-the-point and relevant knowledge drawn from applied social and human sciences has been developed - and accepted.

Again, a closer look at the institutional realities to which the new instruments will have to relate makes it necessary to modify the picture on “old-fashioned ways”. They may have another meaning in the new, post-Soviet realities. The bias in favour of technology and natural sciences in Soviet times may be seen as part and parcel with the totalitarian or authoritarian type of modernisation embarked upon, in which scholarly work that could lead to critical self-reflection had to be subdued. Today, however, sticking to natural science, if it is the only science accepted, may contribute to plurality. For instance in Russia it may be what the environmental cause needs in order not to be totally over-run by big business in nature resource use.

Did instruments work?

So far, a close look at the institutional realities lead to a conclusion that a policy actor which does under-emphasise the control function, and and/or natural science as the basic knowledge-base, will perform poorly. Nevertheless, the study showed that NEPI-like instruments were in use, and with some success. Both observations were made by looking at institutional expectations, language habits and ideas about relevant knowledge.

In the Russian case, NEPIs has struck roots. So far this has taken place only on a small scale and slowly, but nevertheless in a significant way. The methodology chosen made it possible to observe how the legal provisions and organisational set-up resulting from recent decisions made it possible for environmental authorities to make use of deeply ingrained expectations, views on relevant knowledge, and habits of communication and interaction to make NEPIs work at the local level.

In Latvia, environmental protection enjoys a higher status in the nation’s administrative set-up than in Russia. Environmental protection was reaching for the European level in the period covered by this study. The institutional surroundings of Latvian environmental officers differ from that of their Russian colleagues in the much larger presence of international, Nordic and first of all EU actors and institutions in the environmental field. These contribute significantly to the spread of NEPIs. Latvian environmental officers are constantly being exposed to ideas and methods drawn from a foreign setting of ecological modernisation.

Observed at close range, however, interactions between the primary actors - environmental authorities and polluters at local and regional level - did not seem to be more developed than in Russia. Due to historical experiences that both are different from those of Russia, and not least are interpreted differently in Latvia, Latvian policy actors seem to be more reluctant to make use of “old-fashioned” ways.

Although a strong focus on institutional surrounding may be a hindrance to accounting for change, it is not necessarily so. This study has showed that combining a close-up perspective facilitated by case study method with attention to institutions exactly may be what makes it possible to spot change at an early stage.

References

- Amsden, Alice H.; Kochanowicz, Jacek & Taylor Lance (1994): *The Market Meets its Match*, Cambridge, Massachusetts: Harvard University Press.
- Animitsa, E.G & A.T. Tertyshnyi (2000): *Osnovy mestnogo samoupravleniia – uchebnik*, Moskva: Infra–M
- Arkhangel'skii oblastnoi komitet statistiki (1999): *Goroda Arkhangel'skoi oblasti*, Arkhangel'sk: Izdatel'stvo Arkhangel'skogo oblastnogo komiteta statistiki
- Arkhangel'skii oblastnoi komitet statistiki (2000): *Èkonomika i sotsial'naiia sfera Arkhangel'skoi oblasti – Statisticheskii sbornik*, Arkhangel'sk: Izdatel'stvo Arkhangel'skogo oblastnogo komiteta statistiki
- Åslund, Anders (2002): *Building Capitalism – The Transformation of the Former Soviet Bloc*, Cambridge University Press
- Bates, Robert H. (1997): “Area Studies and the Discipline: A Useful Controversy?”, *PS Political Science and Politics*, Vol. XXX, No 2
- Bernhard, Michael (2000): “Institutional Choice after Communism: A Critique of Theory-building in an Empirical Wasteland”, *East European Politics and Societies*, Vol. 14, no 2, pp 316-347
- Bogoliubov, S.A. (ed.)(1999): *Kommentarii k zakonu Rossiiskoi federatsii “Ob okhrane okruzhaiushchei sredy”*, Moskva: NORMA–INFRA M
- Brinchuk, M.M. (2002): *Èkologicheskoe Pravo (pravo okruzhaiushchei sredy)*, Moskva: Iurist'

- Bruckner, Scott A. (1995): «Beyond Soviet Studies: The New Institutional Alternative», in: Orlovsky, David (ed.), *Beyond Soviet Studies*, Baltimore: John Hopkins University Press
- Bruszt, László & Stark, David (1992): Remaking the Political Field in Hungary: From the Politics of Confrontation to the Politics of Competition, in Banac, Ivo *Eastern Europe in Revolution*, Ithaca: Cornell University Press
- Bunce, Valerie (1995): «Should Transitologists Be Grounded?», *Slavic Review*, 54, No 1, pp. 173-83
- Bunce, Valerie (1999): «The Political Economy of Postsocialism», *Slavic Review*, 58, No 4, pp. 756-793
- Burawoy, Michael (1991): “The Extended Case Method”, in Burawoy, Michael (ed.) *Ethnography Unbound: Power and Resistance in the Modern Metropolis*, Berkeley: University of California Press
- Burawoy, Michael (1995), «From Sovietology to Comparative Political Economy», in: Orlovsky, David (ed.), *Beyond Soviet Studies*, Baltimore: John Hopkins University Press
- Burawoy, Michael (1996): “The State and Economic Involution: Russia through a China Lens”, *World Development*, Vol. 24 no. 6 pp. 1105-1117
- Burawoy, Michael and Verdery Katherine (1999): “Introduction” in Burawoy, Michael and Verdery Katherine, *Uncertain Transition – Ethnographies of Change in the Postsocialist World*, Lanham, Md.: Rowman and Littlefield
- Busch, Per-Olof (2003): *Die Diffusion von Einspeisevergütungen und Quotenmodellen: Konkurrenz der Modelle in Europa*, Forschungsstelle für Umweltpolitik – Freie Universität Berlin, FFU Report 03-2003
- Checkel, Jeffrey (2001): “Why Comply? Social Learning and European Identity Change”, *International Organization*, No. 55, Vol. 3, pp. 553–558
- Daugavpils Reģionālā Vides Pārvalde (2001): *Vides pārskats 2000*, Daugavpils

- Davies, Norman (1981a): *God's Playground: A History of Poland (Volume I – "The Origins to 1795")*, Oxford Clarendon Press
- Davies, Norman (1981b): *God's Playground: A History of Poland (Volume II – "1795 to the Present")*, Oxford Clarendon Press
- Davydov, Aleksandr (1997) *Èkologiya kul'tury kak nauchnaia distsiplina, in: Pomore v Barents-regione: èkologiya, ekonomika, sotsial'nye problemy, kul'tura*, Arkhangel'sk: Institut Èkologicheskikh Problem Severa – Kommissiia po Èkologii Soveta Barentseva Regiona – Gosudarstvennyi Komitet po Okhrane Okruzhaiushchei Sredy Arkhangel'skoi Oblasti
- Davydov, Aleksandr N. & Galina V. Mikhailova (2002): "Koriazhma – the town, the river, and the enterprise: self-perception of a single-enterprise town under and after state socialism", in Holm-Hansen, Jørn, *Environment as an issue in a Russian town*, NIBR Report 2002:11
- DeBardeleben, Joan (1990): "Economic Reform and Environmental Protection in the USSR", *Soviet Geography*, Vol. XXXI, April
- DeBardeleben, Joan (1992): "The new politics in the USSR – the case of the environment", in Stewart, John Massey, *The Soviet environmental problems, policies and politics*, Cambridge: Cambridge University Press
- Dement'ev, Aleksandr N. (2001): "Mestnoe samoupravlenie kak odin iz urovnei osushestvleniia publichnoi vlasti", in Liukhtergandt-Mikhaleva, Galina M. & Ryzhenkov, Sergei I., *Tsentr–Regiony–Mestnoe Samoupravlenie*, Seria „Studia Politica” No. 4, Moscow: RGGU
- Dolowitz, David P. & Marsh, David (2000): "Learning From Abroad: The Role of Policy Transfer in Contemporary Policy-Making", *Governance*, No. 1, Vol. 13, pp. 5-24
- Dregalo, A.A. & Ul'ianovskii, V.I. (1999): *Problemy sotsial'noi bezopasnosti gorodov s èkologicheskimi vrednymi gradoobrazuiushchimi predpriiatiiami*, Èkologiya Severnoi Dviny, Arkhangel'sk: Arkhangel'skii Zelënyi Krest i Gosudarstvennyi komitet no okhrane okruzhaiushchei sredy Arkhangel'skoi oblasti

-
- Eckersley, Robyn (1992) *Environmentalism and Political Theory: Towards an Ecocentric Approach*, London: UCL Press
- Elizarova, Galina V. (2002): *Ėkonomicheskie instrumenty okruzhaiushchei prirodnoi sredy*, unpublished project note, Arkhangelsk, Institute of Ecological Problems of the North (RAN)
- Elster, Jon, Offe, Claus and Preuss, Ulrich K. (1998): *Institutional design in Post-Communist Societies: Rebuilding the Ship at Sea*. Cambridge University Press: Cambridge
- Ernšteins, Raimonds (1997) “Ökologie und Umweltschutz Lettlands, in: Handbuch Baltikum heute”, *Nordeuropäische Studien*, Bd. 14, Berlin: Verlag Arno Spitz
- Ernšteins, R. & Kudrenickis, I. (1998) Latvia: “The Environmental Policy Plan, Resources, and Public Awareness”, in: Aage H. (ed.), *Environmental Transition in Nordic and Baltic Countries*, Cheltenham: Edward Elgar pp.156–171
- Ernšteins, R., Ainis Builevics & Silvija Sīle (1999): *Environmental policy, practices and instruments in Latvia, Preiļi*, Unpublished project note 1999:4, Oslo: Norwegian Institute for Urban and Regional Research/Cesams – University of Latvia
- Ferry, Luc (1992) *Le nouvel ordre écologique: L'arbre, l'animal et l'homme*, Paris: Grasset
- Feshbach, Murray & Friendly, Alfred (1992): *Ecocide in the USSR: Health and Nature Under Siege*, New York: BasicBooks
- Gerner, Kristian; Hedlund, Stefan & Sundström, Niclas (1995): *Hjärnridån - det europeiska projektet och det gåtfulla Ryssland*, Fischer & Co: Stockholm
- Gerner, Kristian (1997): *Centraleuropas historia*, Stockholm: Natur och Kultur
- Gilje, Nils & Grime, Harald (1993): *Samfunnsvitenskapens forutsetninger*, Universitetsforlaget: Oslo

- Glaser, Barney and Strauss, Anselm L. (1967): *The Discovery of Grounded Theory: Strategies for Qualitative Research*, New York: Aldine de Gruyter
- Goldman, Marshall I. (1972): *The spoils of progress : Environmental pollution in the Soviet Union*, Cambridge, Mass.: M.I.T. Press
- Goldthorpe, John H. (1994): *Current Issues in Comparative Macrosociology*, ISO Rapport no. 6, Oslo: Department of Sociology - University of Oslo
- Golub, Alexander & Kolstad, Charles D. (1995): *Using Economic Incentives to Control Pollution in Russia*, University of Wisconsin-Madison, EPAT/MUCIA Working paper 20.
- Goskomèkologiiia (2000): *Doklad predsedatelia Goskomèkologii Rossii V.I.Danilova-Danil'iana na zasedanii kollegii Goskomèkologii Rossii po itogam raboty komiteta i ego territorial'nykh organov v 1999 godu i zadacham na 2000 god*, Moskva
- Gosudarstvennyi komitet po okhrane okruzhaiushchei sredy Arkhangel'skoi oblasti (1999): *Sostoianie i okhrana okruzhaiushchei prirodnoi sredy Arkhangel'skoi oblasti v 1998 g.*, Arkhangel'sk
- Haas, P. (1992). "Introduction: epistemic communities and international policy coordination", *International organization* 46 (1): 1-35.
- Hajer Maarten A. (1995): *The Politics of Environmental Discourse – Ecological Modernization and the Policy Process*, Oxford: Clarendon Press
- Hall, Peter A. Rosemary C. R. Taylor (1996): *Political Science and the Three Institutionalisms*, MPIFG Discussion Paper 96/6, Köln
- Hansen, Randall (2002): "Globalization, Embedded Realism and Path Dependence – the Other Immigrants to Europe", *Comparative Political Studies*, Vol. 35, no 3, pp. 259-283

- Harding, Sandra (1987): "Is there a feminist method?" in: Harding, S. (ed.), *Feminism and methodology: social science issues*, Bloomington: Indiana University Press
- Hedlund, Stefan (2001): "Property Without Rights – Dimensions of Russian Privatisation", *Europe-Asia Studies*, Vol. 53, No 2, pp. 213-237
- Hempel, Carl G. (1965): *Scientific Explanation: Essays in the Philosophy of Science*, The Free Press: New York/London
- Henriksen, Lars Skov (1994): "Det civile samfund: Tilbage til politisk filosofi", *Norsk Statsvitenskapelig Tidsskrift*, (10), 4: 357-374
- Holm-Hansen, Jørn (1996): "Common Environment – Divergent Interpretations?" in: *Baltic-Nordic Rendezvous: The Politics of Environmental Cooperation*, The Common Security Forum Studies, Jan Dietz, Boerge Klemmensen, Poul Kragh and Aadne Aasland (eds) Oslo: Fafo report 204
- Holm-Hansen, Jørn (1997): "Environmental Impact Assessment in Estonia and Norway", *Environmental Impact Assessment Review*, Vol. 17, No. 6, 1997, pp. 449-263
- Holm-Hansen, Jørn (2001): "Local elites and the use of environmental policy instruments in a Russian single-enterprise town", in Steen, Anton & Gel'man, Vladimir (eds), *Elites and Democratic Development in Russia*, Oslo: Department of Political Science University of Oslo, Research report No 1/2001
- Holm-Hansen, Jørn (2002a): Polen – ingen start på bar bakke, in Bakke, Elisabeth (red.), *Sentral-Europa og Baltikum etter 1989*, Oslo: Det norske Samlaget
- Holm-Hansen, Jørn (2002b): Litauen – sovjetrepublikken som fekk vesteuropeisk partimønster, in Bakke, Elisabeth (red.), *Sentral-Europa og Baltikum etter 1989*, Oslo: Det norske Samlaget
- Illner, Michal (1992): «Municipalities and industrial paternalism in a 'real socialist' society». In: Dostál, Petr; Illner, Michal; Kára, Jan & Barlow Max (eds.): *Changing Territorial Administration in Czechoslovakia*, Amsterdam: Instituut voor Sociale Geografie, Faculteit Ruimtelijke Wetenschappen, Universiteit van Amsterdam

- Ivans, Dainis (1996): *Voin ponevole*, Rīga: Vieda
- Iyer, Seema (1997): *The Urbanization Transition in Russia*, NRE 545 Monograph
- Jacobsen, Birgit (1998): *Local Self-Government in Russia – a Decade of Change*, Working Paper 1998:117
- Jacobsen, Birgit (1999): *Enterprise, environment and political change in Koriashma*, Unpublished project note 1999:5, Oslo: Norwegian Institute for Urban and Regional Research
- Jänicke, Martin (2000): *Ecological Modernization: Innovation and Diffusion of Policy and Technology*, Forschungsstelle für Umweltpolitik – Freie Universität Berlin, FFU report 00-08
- Jansen, Alf-Inge (1989) *Makt og miljø: En studie av utformingen av den statlige natur- og miljøvernpolitikken*, Oslo: Universitetsforlaget
- Johnson, Chalmers (1997): “Preconception vs. Observation, or the Contributions of Rational Choice Theory and Area Studies to Contemporary Political Science”, *PS Political Science & Politics*, Vol XXX, No 2 pp.170-174
- Johnson, Juliet (2001): “Path Contingency in Postcommunist Transformations”, *Comparative Politics*, Vol. 33, no.3
- Jönsson, Kristina (2002): *Translating Foreign Ideas into Domestic Practices: Pharmaceutical Policies in Laos and Vietnam*, Lund Political Studies 123, Lund: Department of Political Science
- Jordan, Andrew (2001): “New” Environmental Policy Instruments in the UK: Policy Innovations or “Muddling Through”?, Paper to ECPR Joint Session of Workshops, Grenoble April 2001 (permission to cite has been given by the author)
- Jordan, Andrew, Rüdiger Wurzel, Anthony R. Zito and Lars Brückner (2003): “European governance and the transfer of ‘new’ environmental policy instruments (NEPIs) in the European Union”, *Public Administration*, Vol. 81 No 3, pp. 555-574

- Jordan, Andrew, Rüdiger K. W. Wurzel and Anthony Zito (2003): “‘New’ Instruments of Environmental Governance: Patterns and Pathways of Change”, *Environmental Politics*, Vol. 12/1 3-24
- Jordan, Andrew, Rüdiger K. W. Wurzel, Anthony Zito and Lars Brückner (2003): “Policy Innovation or ‘Muddling Through’? ‘New’ Environmental Policy Instruments in the United Kingdom”, *Environmental Politics*, Vol. 12/1
- Kagarlitsky, Boris (1989) *The Thinking Reed: Intellectuals and the Soviet State*, London: Verso
- Karl, Terry Lynn & Schmitter, Philippe C. (1994): “From an Iron Curtain to a Paper Curtain: Grounding Transitologists or Students of Postcommunism?”, *Slavic Review*, 54, No 4, pp. 965-978
- Kjeldsen, Stig (2000): “Financing of Environmental Protection in Russia: The Role of Charges”, *Post-Soviet Geography and Economics*, 41 No. 1, pp. 48-62
- Klarer, Jörg, & Lehoczki, Zsuzsa (1999): “Chapter 1: CEE Regional Analysis”, in: Klarer, Jörg, McNicolas & Knaus, Eva-Maria (eds), *Sourcebook on Economic Instruments for Environmental Policy – Central and Eastern Europe*, Szentendre: The Regional Environmental Centre
- Klok, P.-J. (1995): “A Classification of Instruments for Environmental Policy”, in: Dente, Bruno (ed.), *Environmental Policy in Search of New Instruments*, Dordrecht: Kluwer Academic Publishers
- Komitet prirodnykh resursov Arkhangel'skoi oblasti (2001): *Sostoianie i okhrana okruzhaiushchei prirodnoi sredy Arkhangel'skoi oblasti*, Arkhangel'sk
- Konrád, György (1985) *Mitteleuropäische Meditationen*, Frankfurt am Main: Suhrkamp
- Latvijas Republikas Vides aizsardzības un reģionālās attīstības ministrija (2001): *Daugavpils reģionālā Vides pārvalde – Publiskais gada pārskats*, Daugavpils

- Latvijas Republikas Vides aizsardzības un reģionālās attīstības ministrija (2002): *Daugavpils reģionālā Vides pārvalde – Publiskais gada pārskats*, Daugavpils
- Lemechev, Mikail (1991): *Désastre écologique en U.R.S.S – les ravages de la bureaucratie*, Paris: Sang de la terre
- Lévêque, François (ed.) (1996): “The European fabric of environmental regulations”, in *Environmental Policy in Europe – Industry, Competition and the Policy Process*, Cheltenham: Edward Elgar
- Lewin, Moshe (1995): “Society, Past and Present, in Interpreting Russia”, in: Orlovsky, David (ed.), *Beyond Soviet Studies*, Baltimore: John Hopkins University Press
- Lezhikova, Iu. G. (1998): “Karakter u predely pravovogo regulirovaniia ekonomicheskoi funktsii mestnogo samoupravleniia”, *Iurist*, Moskva, No. 4 pp. 46-50
- Likhachëv, D.S. (1980) “Èkologiia kul'tury”, *Almanak – Pamiatniki Otechestva*, vol. 2, no. 2
- Lodge, Martin (2003): “Institutional Choice and Policy Transfer: Reforming British and German Railway Regulation”, *Governance*, Vol. 16, No. 2, 159-178
- Lonkila, Markku (1999): *Post-Soviet Russia: A Society of Networks?* in: Kangaspuro, Markku *Russia: More different than most*, Helsinki: Kikimora Publications
- Lukin, Iurii F. (2001): *Istoriia, Èkologiia, Èkonomika v meniaiuushcheisia Rossii: Vzgliad iz Arkhangel'ska*, Arkhangel'sk: Pomorskii Gosudarstvennyi Universitet im. Lomonosova
- Malia, Martin (1999): *Russia under Western Eyes: from the Bronze Horseman to the Lenin Mausoleum*, Cambridge, Mass.: The Belknap Press
- Malnes, Raino (1996): *Filosofi for statsvitere*, Tano Aschehoug: Oslo

- March, James G. and Johan P. Olsen (1989): *Rediscovering Institutions – The Organizational Basis of Politics*, New York: The Free Press
- March, James G. and Johan P. Olsen (1996): *An Institutional Perspective on Political Institutions, Governance*, Vol. 9, 247-264
- Marieva, Vera V. (1999): *Environment and environmental policies in Koriazhma – the legal framework*, Unpublished project note 1999:1, Oslo: Norwegian Institute for Urban and Regional Research/Institute of Ecological Problems of the North (RAN)
- Marieva, Vera V. (2000): *Provedenie inventarizatsii vybrosov zagriazniaiushchikh veshchestv v atmosferu promyshlennymi predpriiatami*, Unpublished project note 2000, Oslo/Arkhangelsk: Norwegian Institute for Urban and Regional Research/Institute of Ecological Problems of the North (RAN)
- Michnik, Adam (1985): *Letters From Prison and Other Essays*, Berkeley; University of California Press
- Michnik, Adam (1990): *La deuxième révolution*, Paris: La Découverte
- Michnik, Adam (1995): *Diabeł naszego czasu – Publicystyka z lat 1985 – 1994*, Warszawa: Niezależna Oficyna Wydawnicza
- Mikhailova, Galina V. & Aleksandr N. Davydov (2002): *Environmental conflicts as reflected in Koriazhma's two local newspapers*, in Holm-Hansen, Jørn, *Environment as an issue in a Russian town*, NIBR Report 2002:11
- Ministry of Environmental Protection and Regional Development (1998): *Environmental Protection Policy in Latvia – The eve of the next century*, Riga: Environmental Protection Department, September 1998
- Ministry of Environmental Protection and Regional Development (2002): *"Rio + 10" Latvian National Report*, Riga
- Nogee, Joseph L. & Donaldson, Robert H. (1986): *Soviet Foreign Policy Since World war II*, New York: Pergamon Press

- North, Douglass C. (1994): Economic Performance through Time, *American Economic Review*, Vol. 84, no. 3, 359-368
- Nove, Alec (1977): *The Soviet Economic System*, London: Allen and Unwin
- OECD (1997): *Evaluating Economic Instruments for Environmental Policy*, Paris: OECD
- Peterson D.J. (1993): *Troubled Lands – the Legacy of Soviet Environmental destruction*, Boulder: Westview Press
- Philips, D. C. (1991): «Hermeneutics: A Threat to Scientific Social Science?» *International Journal of Educational Research* 15 (6)
- Pipes, Richard (1999): *Property and Freedom*, London: The Harvill Press
- Pipes, Richard (1999b): "East Is East", *The New Republic*, April 26 & May 3
- Polovnikova, Galina S. (2000): *Mestnoe samoupravleniie i okruzhaiushchaia sreda*, Unpublished project note, Arkhangelsk, Pomorskii Gosudarstvennyi Universitet
- Pryde, Philip R. (1991) *Environmental Management in the Soviet Union*, Cambridge: Cambridge University Press
- Putnam, Robert D. (1993) *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton: Princeton University Press
- Ragin, Charles C. (1987): *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*, Berkeley, CA: University of California Press
- Ragin, Charles C. (1994): *Constructing Social Research: The Unity and Diversity of Method*, Thousand Oaks: Pine Forge Press
- Ragin, Charles C. (1992): "'Casing' and the process of social inquiry", in Ragin, Charles C. & Becker, Howard S., *What is a case? Exploring the foundations of social inquiry*, Cambridge: Cambridge University Press

-
- Ragin, Charles C. (2000): *Fuzzy-Set Social Science*, Chicago: University of Chicago Press
- Roeder, Philip C. (1999): *The Revolution of 1989: Post-Communism and the Social Sciences*, *Slavic Review*, Vol. 58, no. 4, pp. 743-755
- Roness, Paul G. (2000): *Historiske forklaringar i institusjonelle analysar innafor statsvitskap*, *Norsk Statsvitenskapelig Tidsskrift*, Nr 2, ss. 181-195
- Rose, Richard (1991): "What is Lesson-Drawing?" *Journal of Public Policy* 11(1) pp.3-30
- Rose, Richard (1993): *Lesson-drawing in public policy: a guide to learning across time and space*, New York: Chatham House
- Rose, Richard (1998): *Getting Things Done in an Anti-Modern Society – Social Capital Networks in Russia*, *Social Capital Initiative Working Paper Series – the World Bank*, No 6
- Sabatier, Paul A. (1988): *An advocacy coalition framework of policy change and the role of policy-oriented learning therein*, *Policy Sciences* 21: 129-168
- Sairinen, Rauno (2000): *Regulatory Reform of Finnish Environmental Policy*, *Centre for Urban and Regional Studies Publications A 27*, Helsinki University of Technology
- Sakwa, Richard (1998): *Russian Political Evolution: a Structural Approach*, in: Cox, Michael, *Rethinking the Soviet Collapse: Sovietology, the Death of Communism and the New Russia*, London: Pinter
- Schmidt, Erik I. (1995): *Miljøpolitik - hvorfor og hvordan?* Spektrum: København
- Schmitter, Philippe C. & Karl, Terry Lynn (1994): «The Conceptual Travels of Transitologists and Consolidologists: How Far to the East Should they Attempt to Go?», *Slavic Review* 53, No 1, pp. 173-83
- Schultze, Holger (1997): *Neo-Institutionalismus – Ein analytisches Instrument zur Erklärung gesellschaftlicher*

Transformationsprozesse, Osteuropa-Institut der Freien
Universität Berlin, no. 4/1997

- Schwartz, Katrina Z. S.. (1999): *Nature, Development and National Identity: The Battle over Sustainable Forestry in Latvia*
- Segliņš, Valdis & Nadežda Vanaga (1994): *Latvian industrial enterprises: Prospects for environmental improvements*, Rīga: University of Latvia - Centre for Environmental Science and Management Studies.
- Semeniene, Daiva & Żylicz, Tomasz (1997): *Implementing environmental policies – the role for economic instruments*, in Żylicz, Tomasz, *Ecological Economics: markets, prices and budgets in a sustainable society*, report no.8, Uppsala: The Baltic University Programme
- Simon, Roger (1982): *Gramsci's Political Thought – An Introduction*, London: Lawrence and Wishart
- Shlapentokh, Vladimir (1990): *Soviet Intellectuals and Political Power: The Post-Stalin Era*, Princeton, NJ: Princeton University Press
- Sobol', I.A. (1999): *Sovetskii opyt pravovoi okhrany okruzhaiushchei sredy v gorodakh: Dostizheniia i proshchety*, *Ėkologicheskoe Pravo*, No. 1, pp. 41-44
- Somers, Margaret (1998): "We're No Angels": Realism, Rational Choice, and Relationality in Social Science, *American Journal of Sociology*, Vol 104, nr 3, pp. 722-784
- Stark, David & Bruszt, László (1998): *Postsocialist Pathways*, Cambridge: Cambridge University Press
- Sztompka, Piotr (1996): *Mistrusting Civility: Predicament of a Post-Communist Society*, in: Alexander, Jeffrey C., *Real Civil Societies: Dilemmas of Institutionalization*, London: Sage
- Szacki, Jerzy (1994): *Liberalizm po komunizmie*, Kraków: Społeczny Instytut Wydawniczy Znak

- Stake, Robert E. (1994): "Case Studies" in: Denzin, Norman K. & Lincoln, Yvonna S., *Handbook of Qualitative Research*, Thousand Oaks: Sage Publication
- Stake, Robert E. (1995): *The Art of Case Study Research*, Thousand Oaks: Sage Publication
- State Committee of the Russian Federation on Statistics/Arkhangelsk Region Committee of State Statistics (1996): *Arkhangelsk region in figures*
- Stoker, G. (1998): *Governance as theory*, *International Social Science Journal*, Vol 155, pp. 17-28
- Taylor, Charles (1985): "Interpretation and the sciences of man", in: Taylor, C., *Philosophy and the human sciences, Philosophical papers 2*, Cambridge: Cambridge University Press
- Tews, Kerstin (2001): *Politiktransfer: Phänomen zwischen Policylernen und Oktroi – Überlegungen zu unfreiwilligen Umweltpolitikimporten am Beispile der EU-Osterweiterung*, Forschungsstelle für Umweltpolitik – Freie Universität Berlin, FFU report 07-2001
- Tews, Kerstin (2002): *Der Diffusionsansatz für die vergleichende Policy-Analyse: Wurzeln und Potenziale eines Konzepts – Eine Literaturstudie*, Forschungsstelle für Umweltpolitik – Freie Universität Berlin, FFU report 02-2002
- Tews, Kerstin, Per-Olof Busch and Helge Jörgens (2003): *The diffusion of new environmental policy instruments*, *European Journal of Political Research*, N0 42, pp. 569-600
- Tsentr gosudarstvennogo sanitarno-èpidemiologicheskogo nadzora v Arkhangelskoi oblasti (1997): *Regional'nyi doklad o sanitarno-èpidemiologicheskoi obstanovke v Arkhangelskoi oblasti v 1996 godu*, Arkhangelsk
- Tsentr gosudarstvennogo sanitarno-èpidemiologicheskogo kontrolya v Arkhangelskoi oblasti (2001): *O sanitarno-èpidemiologicheskoi obstanovke v Arkhangelskoi oblasti v 2000 godu – Regional'nyi doklad*, Arkhangelsk

- Vasil'ev, Vsevolod Ivanovich (1999): Ustavy munitsipal'nykh obrazovaniy – novoe v mestnom samoupravlenii, Zhurnal Rossiiskogo Prava, No. 2, pp20-32
- Vesere, Rudīte & Bruneniekš, Jānis (1999): Chapter 8: Latvia, in: Klarer, Jörg, McNicolas & Knaus, Eva–Maria (eds), Sourcebook on Economic Instruments for Environmental Policy – Central and Eastern Europe, Szentendre: The Regional Environmental Centre
- Wolman Harold (1992): Understanding Cross-National Policy Transfer: The Case of Britain and the US, Governance Vol. 5, no. 1, pp 27-45
- Yudakhin, Feliks N., Davydov, Aleksandr N. & Ivanov, Andrei A. (1998): Environment and environmental policies in Koriashma: A field report, Unpublished project note, Oslo, 1998:1, Norwegian Institute for Urban and Regional Research/Institute of Ecological Problems of the North (RAN)
- Yudakhin, Feliks N., Davydov, Aleksandr N., Ivanov, Andrei A. & Holm-Hansen, Jørn (2002): A Russian-type single-enterprise town: The case of Koriashma, in Holm-Hansen, Jørn, Environment as an issue in a Russian town, NIBR Report 2002:11
- Yin, Robert K. (1994); Case Study Research: Design and Methods, Thousand Oaks: Sage Publications
- Zeleznev & Zelezneva (1998): Metodika raschēta predel'no dopustimyykh sbrosov i vremenno soglasovannykh sbrosov veshchestv v poverkhnostnye vodnye ob'ekty so stochnymi vodami, Ėkologiya i promyshlennost' Rossii, dekabr'
- Ziegler, Charles E. (1987): Environmental Policy in the USSR, London: Frances Pinter
- Ziegler, Charles E. (1992): Political participation, nationalism and environmental politics, in Stewart, John Massey, The Soviet environmental problems, policies and politics, Cambridge: Cambridge University Press

Appendix 1

List of interviewees

In addition to the interviewees listed below, talks and conversation were made with other actors on an informal basis. Some interviewees told they would prefer to be anonymised. Several among the interlocutors have been interviewed more than once. This is indicated under “place and time”.

Name	Position	Place and time
Astra Vilnīte	officer in the Administration Unit of Local Government Affairs in the Ministry of Environmental Protection and Regional Development	Riga, 30 September 1997
Valērijs Stūris	Head of district development department, Preiļi	Preiļi, 2 October 1997
Anita Rumbiņa	Chief architect, Preiļi	Preiļi, 2 October 1997
Vladimirs Ivanovs	Mayor of Preiļi	Preiļi, 2 October 1997/ 5 and 8 May 1998
Jāzeps Šņepsts,	Director of Preiļu Siers	Preiļi, 2 October 1997/ 7 May 1998
Ligita Začesta and Dace Ozola	Leader/ co-ordinator of foreign affairs of the Regional development department of the Union of local self-government in Latvia	Riga, 3 October 1997
Edvīns Bartkevičs	Chairman of Ogre city council	Ogre, 3 October 1997

Name	Position	Place and time
Ivars Kaļķis	Administrative director, Ogre Knitwear Factory	Ogre, 3 October 1997
Alentina V. Kudriavtseva	Vice-mayor, responsible for social affairs, Koriaghma	Koriaghma, 22 October 1997
Nadezhda N. Usova	Vice-mayor, responsible for property questions, Koriaghma	Koriaghma, 22 and 23 October 1997/27 May 1998
Varvara A. Nadolinskaia	Chairman of environmental protection committee, and director of local ecological fund, Koriaghma	Koriaghma, 22 October 1997/ 28 May 1998/ 7 December 2001
Nadezhda G. Sukhoparova (and staff)	Editor-in-chief of local newspaper "Trudovaia Koriaghma"	Koriaghma, 22 October 1997/ 27 May 1998
Iurii Osushenko	Head of department in Regional state environmental committee, Arkhangelsk	Arkhangelsk, 24 October 1997
Viktor S. Kuznetsov	Chairman of Regional state environmental committee, Arkhangelsk	Arkhangelsk, 24 October 1997/ 28 May 2001
Aleksandr V. Belov	Vice-mayor, Novodvinsk	Novodvinsk, 28 October 1997
Aleksandr V. Smelov/Tat'iana V. Elnikova	Chairman/inspector, Chairman of environmental protection committee, Novodvinsk	Novodvinsk, 28 October 1997/ 9 December 2000
Nikolai V. Druzhinin, Novodvinsk	Mayor and head of administration in Novodvinsk	Novodvinsk, 9 December 2000
Roman V. Buzinov	Head of state sanitary-epidemiological service in Koriaghma (later promoted to head of Arkhangelsk regional service)	Koriaghma, 28 May 1998/Arkhangelsk 7 December 2001
Mikhail V. Chernov, Tat'iana G. Artamanova and Valerii G. Barinov	Head, vice-head and specialist of Koriaghma municipal enterprise for housing and municipal economy	29 May 1998
(anonymous)	Specialist in the environmental department of the pulp and paper mill	29 May 1998

Name	Position	Place and time
Jānis Anspoks	Chief municipal medical doctor in Preiļi and member of town council	Preiļi, 5 May 1998
The two environmental inspectors in Preiļi		Preiļi, 5 May 1998
Krišans Antons	Director of municipal enterprise "Saimnieks"	Preiļi, 6 May 1998
Pavel Kacar'	Head of the Daugavpils Regional Environmental Board	Daugavpils, 6 May 1998
Aleksandr Lapukha and Vera Filimova	Director and vice-director of municipal enterprise "Atvars"	Preiļi, 7 May 1998
Aivars Pizalis	Director of municipal enterprise "Siltums"	Preiļi, 7 May 1998
Inta Hahile	Vice-head of the Daugavpils Regional Environmental Board	Daugavpils, 11 May 1998
Tamara Elste	Editor of local newspaper "Novadnieks"	Preiļi, 8 May 1998
Aigars Kalvītis	Director of Latvia's Dairy Committee (Union of Dairy Enterprises)	Riga, 11 May 1998
–	mayor of Roja	13 May 1998
Valentina Kaža	Chief technologist in Roja Fishmeal Factory	Roja, 14 May 1998
Environmental inspectors	Talsi District Environmental Office	Talsi, 14 May 1998
Lolita Neilande	Inspector, Talsi District Environmental Office	Talsi, 4 January 2001
Haralds Valdemars	Director of municipal infrastructure enterprise	Roja, 4 January 2001
Anatolyi P. Miniaev	Head of regional State Ecological Committee	Arkhangelsk, 25 May 1998
Galina V. Fēdorova	Member of local Ecological Fund	Korjashma, 28 May 1998
Sviatoslav I. Zabelin	Co-chairman Social-Ecological Union	Moscow, 23 May 2001
Vladimir M. Zakharov	Director Centre for Russian Environmental Policy	Moscow, 23 May 2001