

Berge, Erling

Working Paper

Reading notes on property rights and institutions

Centre for Land Tenure Studies Report, No. 02/24

Provided in Cooperation with:

Centre for Land Tenure Studies (CLTS), Norwegian University of Life Sciences (NMBU)

Suggested Citation: Berge, Erling (2024) : Reading notes on property rights and institutions, Centre for Land Tenure Studies Report, No. 02/24, ISBN 978-82-7490-322-7, Norwegian University of Life Sciences (NMBU), Centre for Land Tenure Studies (CLTS), Ås, <https://hdl.handle.net/11250/3133785>

This Version is available at:

<https://hdl.handle.net/10419/300302>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

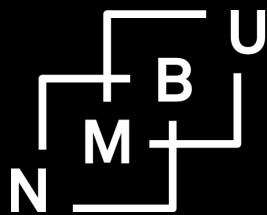
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Reading Notes on Property Rights and Institutions

Erling Berge



Norwegian University of Life Sciences
Centre for Land Tenure Studies

Centre for Land Tenure Studies Working Paper 02/24

ISBN: 978-82-7490-322-7

Reading notes on property rights and institutions
by
Erling Berge

© Content is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International.

Cover Photo © Erling Berge

ISBN: 978-82-7490-322-7

Published in 2024 as CLTS Report 02/24

Department of Property and Law, Faculty of Landscape and Society,
Centre for Land Tenure Studies,

The Norwegian University of Life Sciences (NMBU),
N-1430 Ås, Norway

Abstract

The present work is a collection of essays. The first one is new, written for the collection. Then follows 7 separate essays of varying age. They are named

- On the classifications of property rights
- A property rights perspective on institutional change in the welfare state
- On the nature of welfare goods
- Privatization and the nature of welfare goods
- On the regulation of professions
- On the assessment of property rights systems
- Property rights theory and sustainable resource utilization

They are all concerned with the nature of property rights and how this helps us understand various aspects of the Norwegian welfare state

Key words: property rights; collective action; trust ownership; typology of goods; welfare state; privatization; professions; resource utilization; commons

JEL codes: P48, Q15, Q28, Z13, K11

CONTENTS

Abstract	iii
Table of content	iv
List of tables	v
List of figures	v
Preface	vi
A starting point: On the fundamental importance of property rights	1
NOTE 1: On the classifications of property rights	9
NOTE 2: A property rights perspective on institutional change in the welfare state	37
NOTE 3: On the nature of welfare goods	43
NOTE 4: Privatization and the nature of welfare goods	59
NOTE 5: On the regulation of professions	77
NOTE 6: On the assessment of property rights systems	93
NOTE 7: Property rights theory and sustainable resource utilization	103
APPENDIX Some data on the consumption of welfare goods according to class	125
REFERENCES	130

LIST OF TABLES

Table 1.1 The everyday conception of property	11
Table 1.2 A classification of legally recognized property relations	13
Table 1.3 Bundles of rights associated with positions in the resource management system	20
Table 1.4 Ownership roles in trust ownership	22
Table 1.5 Typology of goods	23
Table 1.6 Types of actors, types of goods, and types of regimes	28
Table 2.1 The everyday ideas of property rights	38
Table 2.2 Hohfeld's ideas of legal rights	39
Table 2.3 Hohfeld's ideas of legal rights and their negation	40
Table 3.1 Types of goods available for the welfare state	45
Table 3.2 Various ways of handling externalities	52
Table 4.1 Examples of "mixed economies" in the provision of welfare goods	63
Table 4.2 Interrelations of processes involved in the production and consumption of welfare goods	67
Table 5.1 The property rights aspects of the relations in the doctor-patient role	79
Table 6.1 Aspects of a property relation	95
Table 7.1 The tragedy of the commons. Payoff matrix in a game of "chicken"	108
Table 7.2 The tragedy of the commons. Payoff matrix in a game where free riding has turned the game of "chicken" into the game of "prisoner"	112
Table 7.3 Defining characteristics of property relations in common property	119
Table 7.4 Types of resources	121

LIST OF FIGURES

Figure 1.1 Hierarchy of rights	20
Figure 4.1 Public goods, club goods, positional goods, private goods	68

PREFACE

The present work is some kind of status report on my main interest (as apart from my main activities) for the last several decades. It started as a collection of the papers I had written since I came to The Department of Land Use Planning in 1984. However, they are not reproduced as they were presented. All of them have seen extensive rewriting, and some are now divided among several.

The various parts of the present manuscript has been presented in at least 11 meetings. The first might have been a session at the XXVIII World Congress of the International Institute of Sociology in Albufeira, June 1986; then in a workshop at the XXIXth International Congress of the International Institute of Sociology, Rome, June 1989; a seminar at the Institute of Social Research and the Institute of Applied Social Research, Oslo, January 1990; a session at the Annual Conference of the British Sociological Association, Guildford, April 1990; a working group at the Norwegian National Sociological Conference, Geiranger, May 1990; a working group at the European Association of Development Research and Training Institutes General Conference, Oslo, June 1990; a working group at the Vilhelm Aubert Memorial Symposium on "The Functions of Law in the Development of Welfare Societies", Oslo, August 1990; The national conference of sociology 1992, Mortsund, Lofoten, June 1992; The III. World Conference of IASCP, Washington, September 1992; the conference "Common property regimes: Law and management of non-private resources", February 1993; at the Workshop on the Workshop, Bloomington, IN, USA, June, 1994; the Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington, December 1998.

I appreciate the comments received on these occasions.

Some people have taken the time and effort to read some of the original papers and shared with me their reactions. In particular my thanks go to Trond Petersen, Natalie Rogoff Ramsøy, Michael Wallerstein, Ulf Torgersen, Lise Kjølørød, Oddbjørn Knutsen, Ole Petter Opsand, Ottar Brox, Hans Sevatdal, and Knut Boge. My second thoughts, as presented here, do not often measure up to the advice I received.

The collection of notes started with the publication "Berge, Erling. 1990. *Some Notes Towards a Property Rights Perspective on Institutional Change in the Welfare State*. INAS-NOTAT 1990:9. Oslo: Institutt for anvendt sosialvitenskapelig forskning (INAS)". The number of notes was expanded during the 1990ies. But as I entered the 2000s my attention was diverted until I became a pensioner in 2016. That allowed time to look into old papers and projects. I think some of the notes still may hold some interest.

Erling Berge
May 2024

A starting point

Erling Berge:

ON THE FUNDAMENTAL IMPORTANCE OF PROPERTY RIGHTS

Let us start with the fundamental conclusion. Property rights have as purpose to provide people with security and predictability: security of income and predictability of behaviour of people around them.

A convenient starting point for our investigation is Douglass C. North's short and very readable book from 1990 "*Institutions, institutional change, and economic performance*". Here he explains: "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction" North (1990, 3). This is a starting point, but it certainly is not the whole story. Arthur L. Stinchcombe (1997) reminds us that large scale institutions applies to organisations as well as individual actors. At the core of a large scale institution we find a bureaucracy that is staffed and created to do a job of regulating organisations and individual actors. Institutions are more than just rules. For a rule system to become an institution it needs guardians charged with the interest and authority to monitor and enforce the rule system. Hence, whenever we find an institution we also find a group of people with a mandate to watch the performance of the rules. At the most elementary level the group of guardians will be the people of the community who devise the rules. In modern states we expect in most cases to find a bureaucracy as guardians. These guardians are human beings with beliefs and values, they have less than perfect knowledge and they have personal as well as class interests. Therefore, the job performance of the bureaucrats can be seen as a distinct and separate force besides the body of rules. But neither is this enough as a starting point. To understand institutions we also need to see the driving forces in their genesis.

The rules we are talking about here will usually be thought of as legal rules promulgated by a central power like a state. But their origin is much closer to our everyday life. The ordering of our everyday lives requires conventions and norms that we learn to follow at an early age. As communities grow people find that conventions, like for example driving (with horse and carriage) on the right side (or the left side) of the road are useful as long as everybody follow them. Many local conventions and norms will, if they are useful, become part of the legal code of a larger community. Rules and regulations require

monitoring and enforcement to be effective. This monitoring is most often done by each person watching both himself and his neighbors with an eye to compliance with the norms they all had learned. This provides a powerful link between institution and behavior. A very readable introduction to this link is provided by Mary Douglas in her book "How Institutions Think" (1986). Douglas' emphasis is on ways of thinking, the categories we use to classify the realities we observe and how these relate to the rules we have learned to obey. But the learning of behaviour never stops. One may conclude that Pálsson (1998) exploits this when he calls for establishing a link between the individual learning of the fishermen and the collective rulemaking of the fisheries management.

Where do property rights come from?

So where do these institutions governing our economies come from? An answer to this question is way beyond the scope of these reading notes. The various approaches to the study of societal institutions in the various sectors of society give partial glimpses of the way they currently are working. And the theoretical reconstructions of their internal logic give glimpses of why certain aspects of them are so persistent. But an understanding of the historical genesis of the current structures is not yet within reach.

However, that said, I cannot resist mentioning some of the current discussions. One of the more recent surveys is Graeber and Wengrow (2021)'s book "The dawn of everything: a new history of humanity". On the question of private property they conclude that its origin is found in the ideas of the sacred (see pages 156-163). Below in NOTE 1 it is suggested that if something is abundant people usually will not bother to create property rights. In the prehistoric communities without authoritarian rulers that Graeber and Wengrow discuss, the 'objects' of most importance seemed to be social constructs such as incantations or objects needed in rituals asking the gods for help or support. These social constructs were most often treated as personal private property jealously guarded. One of the defining characteristics of private property is the ability to exclude other persons from using or enjoying the property. Thus there can be a link between the sacred and the idea of private property. The link between the sacred and the idea of property is earlier suggested by Godelier ([1984] 1986, 75-81). The sacred is clearly a social construct in the meaning of Searle (2010). His discussion of institutions is well worth considering. Searle's first book (1995) was named "The Construction of Social Reality", and was clearly an allusion to

Berger and Luckman's (1966) much older "The Social Construction of Reality". The point is of course that important parts of reality exist as such only because we believe it. Searle's prime example is money. An example closer to our topic of property might be boundaries in land. Rackham (1986, 19-23) presents a parish boundary between Butcombe and Wrington in Somerset. The boundary has two semi-circular deviations that seems quite anomalous on a map from the 1980ies. But this boundary has "always" been like this. The explanation provided by Rackham is that the half-circular boundaries follow the boundaries of prehistoric ring-earthworks.

Another study indicating an ancient origin of ideas of property rights is Gintis (2007)'s suggestion that our instinctive loss aversion and territoriality, which humans share with many other species, might lead to a respect for private possessions. Students of the human propensity to follow rules often start with the Darwinian model of evolution: how can it be that humans evolved emotions and instincts resulting in cooperative behaviour? Richerson and Boyd (2005), Boyd and Richerson (1985, 2005) point to culture as the main context and driver of human behaviour, but acknowledge the biological foundations. Joyce (2006) supports this arguing for an innate basis for moral emotions. But property rights concerns more than just propensity to follow rules. It concerns material values. Within economics a discussion of property rights emerged following (Coase 1960, 1991)'s discussion of allocation of property rights in a neo-classical economy. We discuss this below in NOTE 1, pages 31-34. Here we shall just take note that within psychology there is a tradition of studying modifications of the rational choice model of neo-classical economics. Most notable is the prospect theory developed by Daniel Kahneman and Amos Tversky (Kahneman and Tversky 1979, 2000, Tversky and Kahneman 1986). The theory introduces concepts of a status quo bias, endowment effect and framing effect in the way actors choose alternative actions courses. These ideas have been extensively studied by game theoretic experiments (Gintis 2009).

Gintis, Fehr and Bowles (Fehr and Gintis 2007, Gintis 2009, Bowles and Gintis 2011) seem to be at a leading edge in research on human motivation and collective action. Their approach is experimental game theory. They have convincingly disproved the models Homo Economicus and Homo Sociologicus. Instead they use a framework they call the BPC (beliefs, preferences, constraints). They conclude that people (actors) choosing actions where the outcome depends on the choices of other people for the most part are strong

reciprocators, choosing an action alternative on the presumption the others will be choosing the cooperative solution.

On the mystery of state power

The conclusions above suggests that the origin of institutions is found in the human need to solve the many and pervasive problems of collective action to safeguard life and livelihood. Hernando De Soto (2000) tells a compelling story of the power of these needs, and of the problems created by governments refusing to see them - or being unable to create institutions taking care of these needs. The academic study of this problem is as old as social science, starting no later than Thomas Hobbes' ([1651] 1987) study of "Leviathan". Elinor Ostrom's (1990) book on "Governing the Commons" is a significant contribution. It is not the last word, but eminently relevant for our interests here. In her textbook "Understanding Institutional Diversity" from 2005 (Ostrom 2005) she improves our understanding of how institutions in practice may be created and work. While the single omnipotent and omniscient person would have no management problems at all, such a person would neither have fellows nor a society around. If we take as a starting point that fellow humans are around, that they compete in the acquisition of benefits from divisible resources, and that they also are concerned about the equity of the final distribution, inevitably certain problems follow.

On the problem of resource governance we can name the following problems that need to be solved (see e.g. Ostrom (1990)):

- Rulemaking: what are the procedures for (re-)negotiating the rules governing the management of the resource?
- Allocation of resource quotas: who gets how much from each resource?
- Monitoring: how do you control that no one takes more than agreed and that everyone pays his/ her share of the cost?
- Sanctioning: what consequences do rule breaking entail?
- Allocation of costs: how do you allocate costs (transaction costs, monitoring, and sanctioning costs)?

The core of the agreement on allocation, monitoring and sanctioning is in the Western world known as property rights. Their formal logic is fairly well known, and the theory outlining this may be in the process of stabilizing (see e.g. Sened (1997)). But their social dynamic and their real world mechanisms of stabilization are not well known.

Sened (1997) provides an illuminating discussion of the social contract theory of the origin of property rights. Discussing the theories of Locke, Hobbes, Hume,

Rousseau, and Mill he concludes that we may well be said to live in a social contract where the property rights of people and the power of the government support each other. But the theories do not explain how the social contract emerged and developed. To help us understand this, he advises us to focus on the political system. Property rights are maintained and changed by political decisions. Government officials "protect property and other individual rights because protecting such rights helps them obtain the political and economic support that is necessary for the maintenance of their governments." (Sened 1997, 29). Thus Sened looks for the origin and development of property rights in bargains between governments and citizens. This is somewhat neglected topic.

It is to this problem De Soto's study speaks, not so much in terms of the exact mechanisms as in outlining a neglected area of research, and the devastating consequences of this lack of knowledge. De Soto and his team investigated the relation between the legal system and the activities of ordinary people in terms of the cost of getting title to housing lots or starting a small business in Cairo, Lima, Manila, Mexico City, and Port au Prince. In two of the countries he investigated, he found that this took 6-25 years and cost more than the land was worth. Exactly as the formal theory predicts and common sense suggests: People do not follow such rules! The result is an enormous sector of extra-legal activity comprising 50-85% of the population in most of the developing world. These extra-legal people are ordinary people who build houses, start businesses, and work, all outside the official legal system. The implications for the dynamic of the economic system are profound. The property rights that the various groups develop in order to secure lives and livelihoods are not legitimated and defended by the state, they remain local and precarious. Every so often the state tries to evict some group of people defined as squatters on land they do not own. The trust in the state declines. There is a distance between what people believe is their property and what the state believes.

De Soto's main argument is that the lack of property rights results in lost opportunities for sustaining economic growth by recognizing and fixing the capital these people create in their everyday work, building their homes, and developing their businesses. But the implications go further. The most important is that it reveals a profound lack of understanding of property rights among politicians and top administrators of these states, and, by implication, the consultants and advisors of the international aid organisations. The system furthers mistrust to the state, and a lack of everyday understanding of the

relation between state and property rights necessary for modern economies. This has devastating consequences not only for economic growth but also for modern resource management. More, and theoretically better informed, studies of property rights institutions in the developed world might help illuminate the missing parts of the institutional structure of the rest of the world.

The problem of doing good: Kenya's effort at redefining property rights

Starting in 1954 Kenya was the first African country with a government sponsored titling program with the aim of privatizing land holding modelled after the 1925 English land law (Okoth-Ogendo 1986, Ensminger 1996). The program followed up on earlier local non-governmental privatisation efforts. The goal was to encourage increased agricultural production. The assumption was that land was not the constraining factor of production. Capital was assumed to be a major constraining factor. More investment capital was needed. Providing individual titles to land with possibility for mortgaging was seen as the solution. It did not work as intended. The reform program had to be abandoned. There was a reversion to customary tenure.

Some details from the results might be of particular interest for students of land consolidation. Title was given to the man in the household. This meant that women and children lost most of their customary rights in the land. Upon devolution it was determined that a maximum of 5 persons could inherit a parcel of land and each parcel had to be of a minimum size calculated to provide a sustainable livelihood. But most heads of households had more than 5 sons and daughters, but since women could not get title the number of sons was decisive. And even if the number of descendants was appropriate the costs of registering land was so great that few could see any advantage in doing so. Consequently most land ended up as belonging to dead persons (according to the land register) while people used land according to custom. To this we should add that banks early on developed a high reluctance to providing mortgage loans. They encountered strong resistance to foreclosure and new owners were not welcome. Many non-locals who bought land had to give up and leave. In Kenya scholars had to conclude: Creating the dynamic economy as development theory would like to do was not easy. See also Firmin-Sellers and Sellers (1999) about similar problems in Cameroon.

Neither does ordinary development aid deliver development as promised. Gibson et al. (2005) explores in "The Samaritan's Dilemma" how the

institutional structure of the development aid may create perverse incentives counteracting the good intentions. The same may also be due to dysfunctional institutions of the recipient country. Our understanding of how development comes about is not good enough. In particular our understanding of how different institutional structures interact needs improvement. Not only in Kenya but around the world scholars are struggling to understand how development can be achieved. Well-functioning property rights institutions are clearly needed. But they consist of more than paragraphs. There must be a certain correspondence or fit between the legal rules and the rest of the social fabric.

Boyd and Richerson (1994) provide an interesting example of how the local culture translates into differences in use of property rights in land. They are finding the example in the work of Sonya Salamon and her co-workers (Salamon 1984, 1985). "Salamon and her co-workers have conducted a number of studies investigating the effect of ethnic background on farmers in the American middle west" (Boyd and Richerson 1994, 75). Salamon compared two small communities, one settled by German immigrants, the other settled by people from other parts of the US, mainly from Kentucky. The two communities were only about 30 km apart, had similar soil conditions and population sizes. The two communities had very different attitudes towards agriculture. The German town saw agriculture as their primary goal in life and the farm should continue in the family. They were very reluctant to sell land and supplemented grain production with dairying and livestock production. The "Yankee" farmers on the other hand view farming as a profit making business with almost exclusively grain production as output. They were not very concerned that their children should continue farming. They were more concerned about their education. They buy or sell land based on the profit margin. The farms of the Yankee farmers are almost twice the size of the German farms, mostly due to the amount of land rented. Cultural values do have an impact on the use of land (Salamon 1995).

The problem of collective action

Even if property rights starts by beliefs in them, our modern societies require an understanding of how different kinds of collectives can come to agree on property rights. Collaboration, collective action, will sometimes be structured in a way called a social dilemma (see more on social dilemmas in NOTE 1 below).

A social dilemma obtain when the expected outcome of an actors actions

depends critically on the actions chosen by other participants in the collective. In some core situations the dilemma may create the negation of what one intended. Such situations are usually called social traps. If the intention was to create wealth one may end up poorer than one started out. We are far from understanding the dynamics of social dilemmas. Trust has an important role to play (Rothstein 2005). But so is the way of thinking among the members of a group: what beliefs do they entertain (B), what are their preferences for outcomes (P), and which conditions are they encountering (C). Gintis, Fehr, Bowles and collaborators work with what they call the BPC framework within a tradition of experimental game theory (Gintis 2000, Fehr and Gintis 2007). Gintis and his collaborators have convincingly disproved the simple models of Homo Economicus and Homo Sociologicus (Gintis 2009).

In summing up this research Bowles and Gintis (2011) find that humans in general are a cooperative species. People can roughly be divided into altruists, who make unconditional efforts to cooperate, conditional co-operators (or strong reciprocators), who cooperate if others cooperate, and egoists, who only cooperate if they see it to be to their advantage (Gintis et al. 2005, Ch1). A substantial majority of people are found to be strong reciprocators. The conclusions of Bowles and Gintis (2011) that humans basically is a cooperative species are based on game theoretic models and experiments. As shown by Sened (1997) game theory is a powerful tool for investigating how collective action may develop. In this it is interesting to note that the evolution of moral thinking basically supports the conclusion of Bowles and Gintis, that humans is a cooperative species.

Another approach to the problem of non-self-regarding motivations among people is called Moral Foundations Theory. It was developed within social psychology (Haidt 2007). This theory has recently been used in a study of political orientations among Norwegian voters (Enstad and Finseraas 2024). They find a clear division between moral universalism (care and fairness) and moral particularism (in-group loyalty, authority, and sanctity). How this may affect the treatment of social traps and even impact the development of our property rights institutions remains to be studied. The knowledge of how to construct institutions that make people avoid social traps is at best in its infancy. The most promising start is probably Elinor Ostrom's design principles (Ostrom 2005, 2010).

NOTE 1

Erling Berge:

ON THE CLASSIFICATIONS OF PROPERTY RIGHTS:

A survey of literature¹

Introduction

A classification of property rights involves three classes of phenomena: the “thing” which is subject to being property, the actors “owning” these “things”, and the interests of the rest of society, the "non-owners", in the ownership relation. Hence we may organise our investigation around three questions:

- Is there any regularity in the kinds of objects (i.e. rights or goods) that can be made into property?
- Is there any regularity in the types of subjects which may hold property (types of owners)?
- Is there any regularity in the rules delineating owners from non-owners?

The answer to the first question seems to be no. Historical and cross-cultural studies seem to show that while there within a society may be clear and coherent rules of what can be made into property, for the general case there are absolutely no consistent classification of what can be recognised as property and what cannot (Godelier [1984] 1986). The most one is able to say is that if something is abundant (e.g. air) people will usually not bother to make it into property. For the present discussion we shall of course have land at the back of our mind, not so often the copyrights to a journal article.

The second question leads us to the answer that three different types of entities are usually recognised as owners:

- a state (or its equivalent) may hold property,
- properly defined and legally recognised groups/ collectives (such as villages, tribes, other local communities, families, user associations, NGOs (non-governmental organisations), and business corporations) may hold property, and
- individuals may do so.

¹ This is a revised paper, first written as a background for 2 other papers Berge and Aasen (2001) and Berge (2002). It was also delivered to COST Action E19 in 2001 (Glück et al. 2003). Parts of this NOTE is found in Norwegian in Berge (2011).

Corresponding to these types of owners one speaks of state property, common property, and private or individual property since the rules delineating owners from non-owners often differ for the various types of owners.

The important distinction between types of owners lies in the differences in how goals are decided on and action plans formulated and acted upon. For individual actors, goals emerge through a cultural process. These are acted upon within the constraints posited by established property rights and the incentives of relative prices. Relative price is here seen as a general concept summarising the relation between effort and benefit. People tend to choose within their information constraints the available action alternative promising the most benefit per unit of effort. In this sense choices are bounded rational (Simon 1957, 1986).

Collective actors are comprised of individuals each with their own goals. The formulation of collective goals as well as action plans is therefore subject to the problems of collective action (Olson 1965, Hardin 1982). But also these actors are subject to the constraints of established property rights, the cost of getting appropriate information, and the incentives of relative prices. The state is a particularly important category because it has the power to redefine property rights and relative prices in a variety of ways, but always within constraints from culture and social structure. The state is often an owner with direct responsibility for large areas. It is always a stakeholder in the sense of representing the public interest in how the various resources are used. In rule-of-law states its position as resource owner is subject to established property rights and procedural rules of law making. In other states the two roles of law maker and resource owner tend to become confounded.

The last question we raised about any regularity in the rules delineating owners from non-owners can be answered simply in terms of the differences in legitimate powers assigned to them. But this is an answer that needs much more explanations. We have to start asking about what property rights really are.

What are property rights?

At the outset it may be convenient to distinguish between three concepts of property:

- property as understood in the everyday world of common people,
- property as understood in the jurisprudence of property, and
- property as understood in the social sciences.

These different conceptions of property are successive generalizations of the former. They are nested in that the legal concept of property builds on and implies the everyday concept of property in the same way as the social science concept builds on and implies the legal concept of property.

The everyday conception of property rights

Our everyday conception of property is clear in its main implications. A hypothetical opinion poll about the differences between mine and "thine", or what I can do with mine, what you cannot do with mine, what you can do with yours and what I cannot do with yours would reveal fairly unanimous opinions. Snare (1972) investigated the meaning inherent in the everyday concept of property. He found it could be described by six types of rules, three defining the rights of the owner and three types of rules regulating the relation between owner and non-owners (see Table 1.1).

Table 1.1
The everyday conception of property

Ownership rights:

- The owner has a right to use his property, meaning,
 - it is not wrong for the owner to use his property, and
 - it is wrong for all non-owners to interfere with the owner in his use of his property.
- Non-owners may use the property of the owner if and only if the owner gives his permission, and
- The owner may permanently or temporarily transfer his rights as defined by rules 1. and 2. to specific other persons by consent.

Relational regulation:

- Punishment rules: regulating the cases where non-owners interfere with an owner's use of his property.
 - Damage rules: regulating the cases where non-owners cause damage to someone's property.
 - Liability rules: regulating the cases where someone's property through either improper use or neglect causes damage to some person or the property of some person.
-

Source: Snare (1972)

Snare (1972, pp.203-204) discusses the meaning of "right to use". The conclusion is that an owner acting in a society is bound not only by ownership to any tools used in acting, but first of all by rules regulating activity within the society independent of ownership to any tools used in the action. Thus the everyday conception of ownership presupposes all other rules within the society: the extant institutional structure (North 1990, 3).

Most people would no doubt recognise these propositions as a rather obvious description of their everyday world. If, however, one asked about the purposes of property: why do we have such a thing as "property", most people would be at a loss for an immediate answer.

Prompting farmers and landowners to justify their possessions, Newby, Bell, Rose and Saunders (1978) found four types of justificatory ideologies they called capitalistic, individualistic, collectivistic, and altruistic justifications. Those turning to capitalistic justifications emphasised that their property was reward for hard work and risky investments. Those using individualistic justifications compared the large estates to everyday possessions like clothes or cars. The collectivistic justifications argued that wise management of property created work and income for many people besides the owner. And the altruistic justifications saw the owner only as a steward for future generations. It is no coincidence that these are the main arguments used by philosophers to justify property (For reviews see Schlatter (1951), Reeve (1986), Waldron (1988), Munzer (1990)).

The jurisprudence of property rights

Snare (1972) in his investigation of the everyday concept of property provides a bridge between this concept and the legal concept.

A right, as seen from the point of view of the right-holder, is an expectation about the behaviour of other actors affected by the exercise of the right. Coleman (1990a, 45-64)'s discussion of rights to act is instructive here.

A property right, then, is an expectation about the behaviour of all non-owners. It is different from other rights (non-property rights) in that the expectation is legitimate and relates to the appropriation of reality. The non-owners as well as the owners accept it as legitimate. A right recognised as a property right have in developed democratic societies been given special

status, protecting the holder of the right both from non-holders and from the state. If a legal system recognises a right as a property right, special procedures are used and the holder of the right is given special remedies to help enforcing the right against contenders.

The process of how a right comes to be regarded as a property right is not well understood, but it would seem to be connected to a process of legitimization of authority in relation to the development of a conception of justice. In other words it is tied to the development of legitimate and just use of power. It may in this context be instructive to study in more detail the discussion of "New Property" that was initiated by Reich (1964) asking about the role of government in granting individuals various forms of wealth "subject to conditions which express 'the public interest.'" We shall return to his paper below. In Norway a focused study of the history of land rights to the lands used by Sámi may be instructive.

Relations among people are dual in nature since they can be experienced from two perspectives. By the nature of the problem, to regulate the streams of benefits from human activities, a property relation has to be an asymmetrical relation. Hohfeld (1913, 1917) saw this and found that rights recognized by law had a dual asymmetrical nature. His project was to describe legal rights in general in as precise language as possible (see Munzer (1990, 17-22)), but applied to rules specifying the relations between one (or more) owner(s) and all non-owners in regard of some entity the owner(s) regard as their property his typology also presents a classification of the various legally recognised property relations. They to fall into four pairs:

Table 1.2

A classification of legally recognized property relations

		IF OWNERS HAVE	THEN NON-OWNERS HAVE
Use aspects	1.	claim-rights	duties
	2.	privileges	no rights
Exchange aspects	3.	powers	liabilities
	4.	immunities	no powers

Source: Hohfeld (1913, 1917)

The various types of rights and duties are all tied to actions and transactions: what owners are allowed to do or not do, what non-owners are allowed to do or not do, and how the power of the legal system may help the owners to protect and exercise their rights.

The expectations of the owners about the behaviour of the non-owners, appears to the non-owners as duties towards the owner. The privileges of the owner concern which behaviour the owner is allowed without having to consider the reactions of the non-owners. Correspondingly the non-owners have no rights (i.e. expectations about the behaviour of the owner) that can interfere with the behaviour of the owner.

The powers of the owner are the abilities to voluntarily create new legal relations with a non-owner. The powers of the owner are curtailed in the law of contract and include, of course, everything from the short time renting of a consumer durable to outright sale of, or giving away, an entire estate. If an owner wants to exercise his power to create a new legal relation with a non-owner, the non-owners susceptibility to having his legal position altered is called liability (see also Munzer (1990, 18)). On the other hand, an owner has immunities against attempts from non-owners to create new legal relations or interfere with established relations. The non-owners have no powers to create new legal relations.

To this must be added that the focus of the property relation in any case is some particular benefit from some particular source. The expected and allowed behaviours concern this "something". The same does the possible new legal relations. It is important to note that for a relation to be a property relation, it must be enforceable. The rights, privileges, powers and immunities of the owners are one way or another protected. Those violating them do so at a real risk of suffering sanctions.

Extending Hohfeld's paradigm of rights and duties

Hohfeld's (1913, 1917) conception of legal relations applied to the relation between owner and non-owner in relation to an object also contains the negation of this relation, the "jural opposite" (for example what does absence of a claim rights /duties relation mean?) as seen from the owner's position:

	RELATION		ITS NEGATION
	OWNER	NON-OWNER	
Use aspects	claim-rights	duties	no-rights
	privilege	no rights	duties
Exchange aspects	powers	liabilities	no-powers
	immunity	no-powers	liabilities

Commons (1924) takes the discussion further. He clarifies the meaning of the categories outside the strictly legal context as well as the distinction between the directly interested parties (owner/ non-owner) and the «uninterested» third party (such as the «public interest») to which Hohfeld's «jural opposite» (negation) relation applies if interpreted in the meaning of a limit on the owner/ non-owner relation.

The social science concept of property rights

It is easily seen how the 6 rules described by Snare can fit into the more abstract scheme of Hohfeld. However, the legal concept of property seems to have lost touch with the everyday concept, which sees property as a "thing" even though it obviously implies this in its actual application. In its abstract focus on the relation between members of a society, the law has had to leave out the property seen as a “thing” in order to achieve its main task of bringing justice to the transactions among people.

In the social sciences concerned with societal development this is no longer possible. Property seen as a “thing" has to be brought back in. But the "thing" brought back in is even more abstract than the relational concept of property. Economists might say that the abstract "thing" is the “goods” and “bads” of everyday life, the utilities of social actors. Sociologists might say it simply is concrete and effective rights and duties – or maybe more familiar: conventions, rules, norms and values - as these are actually distributed in a society. In general, social science seems to lack a precise technical language

for the discussion of property rights and institutions. Buck (1998, 2-5) demonstrates how technical terms in law and political science can convey different meanings.

However, social science is interested in the social power attached to property rights. The allocation of rights and duties in relation to particular resources determine whose goals will count by how much in the choice of management goals, in the timing and duration of extraction, in the application of technology, and in the intensity of effort expended to achieve the goals. But even more important: in any society those who have much property also will have much power in the sense that they will be able to affect the lives and destinies of other people – the non-owners.

The crucial distinction between the legal conception of property and the social science conception is best seen by focusing on property seen as concrete existing, effective rights used in the everyday appropriation of reality. The legal conception is concerned only with those rights recognised by the law as property rights. Rights given the status of property rights by the law are treated differently from other rights. The procedures in court are different. The remedies granted the rights holders are different. The restraint shown by the state in interfering with these rights are often remarkable.

In contrast to this the social science conception of property also includes rights not currently recognised as property rights by the law (except in the concept of common law), provided the rights actually exist and are used in the everyday appropriation of the world. This opens the possibility for studying changes in property rights: the emergence of new rights, how people exercise their new rights, and finally the recognition of their new rights by the legal system as property rights. For more on the nature of rights see Coleman (1990a).

It is usually taken for granted in the study of property rights that property rights include all the claim-rights, privileges, powers and immunities recognised by (mature) legal systems (Honoré 1961). “Ownership” of something or “property rights” to something is considered a “bundle” of rights. However, the discussion of private property rights is usually focusing on the right of

exclusion from the good and the possibility of alienating the right to its utility. The central feature is the owner's power to alienate his property either in bequeathing or in trade. Without the right of alienation and exclusion, the rest of the bundle of rights seems to be theoretically uninteresting for the (private) property rights paradigm. However, a right, even if in itself inalienable or applying to a good only partly, may give rise to a valuable stream of benefits, some of which may be alienable. In between the alienable and inalienable there are all possible variations of the conditionally alienable. These not completely alienable rights can be as private as any completely alienable and excludable good. The problem is not alienation or not, but monitoring and enforcement of whatever rights there are, on the one hand, and the dynamic consequences for transaction costs and distributional equity, on the other. This means that to study how property rights work we need to "unbundle" the bundle of rights assumed by the simple conception of "thing ownership".

Property rights and stakeholders

The discussion of property rights so far has shown that "ownership rights" has as its complement the "no-ownership" duties on the one hand, and, on the other hand, the role of the disinterested third part, the state. From this it is seen that in all situations effective property rights will be defined by three types of rules:

- Statutory rights and duties of owners,
- Customary rights and duties of non-owners,
- Statutory modifications of customary and statutory rights and duties
 - by limiting the options of (land) owners (zoning regulations or land use planning),
 - by regulating the behaviour of both owners and non-owners, and
 - by regulating the use of technology.

Property rights in this meaning do not only define owners (those with enforceable rights), but more generally "stakeholders" (anyone with a legitimate interest in a resource). Stakeholders are the owners and the non-owners with a legitimate interest in the resource.

Stakeholders without statutory property rights represent a difficulty for many legal systems. They usually do not have legal standing in court proceedings. During the last decades there has been a growing emphasis on citizen

participation in the management of the environment (Appelstrand 2001). This has led to new approaches giving standing to stakeholders based on their representation of a general public interest. This process can be viewed as a step towards giving public goods legal protection.

In an empirical study of the rights and duties of stakeholders in some particular resource the separate contributions of several sources have to be considered:

- customary behaviour towards the resource as defined by the local culture,
- legislation defining the rights and duties of a holder of the particular resource,
- public legislation on environmental protection and resource management, and
- ideas of equity in dealing with competing interests in the resource.

The relative strength of the various sources can be expected to vary from society to society, from community to community, and, perhaps, also for various types of goods.

Rights of management

Rights seldom come one by one. Usually they are defined generally and will be thought of as bundles in the sense that the general description of them will allow for some kind of specification into «elementary» rights. The rules of specification, however, may vary. This leads to different bundles of rights. The key is the specification rule.

In a resource governance perspective the most important dimension of property rights is their role in the management of resources. The goals of the governor will then frame the specification. Based on the interests of the owner, the management problem may be specified according to:

- decisions furthering productive and profitable activities,
- consumer interests of the beneficiary of the resource, and
- subsistence security of resource users.

To further productive and profitable use of a resource, several types of management decision rights are necessary:

- rights of access,
- rights of use or extraction,
- rights to make decisions about access and use or extraction,
- rights to exclude, and
- rights to alienate the resource.

The various rights can be bundled in several ways. The full bundle defines the rights of the owner.

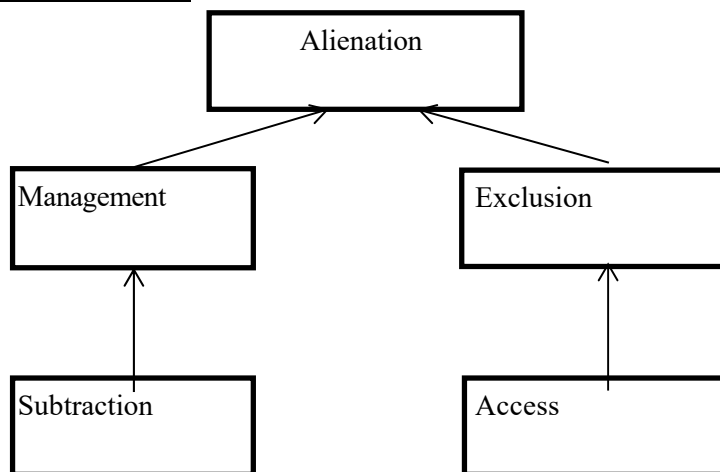
Bundles of hierarchical rights of a management

Rights are often defined in an inclusive hierarchy where each category implies the rights in lower level categories (Schlager and Ostrom 1992). Rights of alienation imply rights of management and exclusion. Rights of exclusion imply rights of access and management, and rights of management imply rights of subtraction (Figure 1.1). Theoretically the five rights can be combined into five packages containing more and more extensive rights. They are often seen to correspond to some particular role in the social system managing a resource (Table 1.3).

The definition of «owner» in table 1.1 corresponds to the view holding that only right of alienation and exclusion will constitute «real» private property. The bundles of rights of an owner as defined by table 1.3 can be said to represent an action or production oriented specification of rights. It emphasises what an appropriator may legitimately do with whatever is owned. It has for some time seemed almost like a cross-cultural standard of property rights in the social science studies of property rights systems.

Figure 1.1
Hierarchy of rights

Collective choice rules



Operational choice rules

Source: Schlager and Ostrom (1992); For more on collective/ operational choice see Ostrom (2005, 59).

But this is not the only approach to specification of rights relevant for resource management. If we take the standard ownership position as given, one may further think of other ways of specification of rights to resources. One is the specification of rights as developed in the trust institution. If the hierarchical specification in table 1.3 is called production oriented, the trust specification can be called utility oriented in the sense that its origin was the problem of securing the long term utility of some resource for a specified group of persons.

Table 1.3
Bundles of rights associated with positions in the resource management system.

	Owner	Proprietor	Claimant	Authorised user	Authorised entrant
Alienation	X				
Exclusion	X	X			
Management	X	X	X		
Subtraction	X	X	X	X	
Access	X	X	X	X	X

Source: Ostrom and Schlager (1996, 133)

Management according to the interests of a beneficiary

In English and American jurisprudence the trust institution allows separation of legal, managerial and beneficial ownership rights in a way different from what is stipulated in table 1.3.

To understand English land law some old institutions of English land law needs to be understood. Starting in the 13th century there developed a distinction between courts of law and courts of equity. The courts of law judged according to the letter of the law, the courts of equity judged according to the Christian conscience of the defendant and plaintiff. If a case was brought before the "wrong" court it had to start from the beginning in the other court system. In 1873 the two court systems were joined, but still there were two bodies of law. The two systems for judging developed in tandem with the development of the trust institution. The trust institution could be governed by the courts of equity. In medieval England there was a practice of conveying estates for use. Due to problems of collecting feudal dues this was more or less prohibited in 1536 (the statute of uses). In the centuries thereafter there developed a practice called trust ownership which performed much the same function. A person, a trustee, was given the legal title to an estate for beneficial enjoyment by "cestui-que-trust". See Wikipedia on "court of equity", "statute of uses" and "trust (law)", also Berge (1988a, 1988b), Simpson (1986).

In a trust the owner according to law and equity has a package of rights put together differently from the hierarchical system of table 1.3 (see table 1.4). For land trusts the owner, called trustee, will usually only have the power to alienate the land and enough of the other rights to exercise the right of alienation in conformity with the trust put in him or her. The beneficiary of the trust will retain the rest of the rights and duties. But rights of management may be delegated to some professional while the beneficiary has access and withdrawal rights to the net utility of the property: the net stream of income and other goods it generates. Then the rest of the rights of exclusion, management, subtraction and access are shared according to what needs the manager has and to the benefit of «cestui-que-trust» (Meaning "the one who trusts". For technical terms it is referred to Black's Law Dictionary (Black 1990)). This approach to defining the central role of the beneficiary may be called consumer oriented. The other bundles of rights in the system are put together as complements to the rights of the beneficiary.

The flexibility of this system and its ability to address new concerns also in resource management is evident in the development of public trusts such as «The National Trust» in England and «The National Trust for Historic Preservation» in the United States (see Wikipedia).

Table 1.4
Ownership roles in trust ownership

	Trustee	Cestui que trust (beneficial use)	Manager (managerial use)	Ordinary owner (Table 1.3)
Alienation	X1			X1
Exclusion	ΔX_{21}	ΔX_{22}	ΔX_{23}	$\Sigma \Delta X_{2j} = X_2$
Managemen	ΔX_{31}	ΔX_{32}	ΔX_{33}	$\Sigma \Delta X_{3j} = X_3$
Subtraction	ΔX_{41}	ΔX_{42}	ΔX_{43}	$\Sigma \Delta X_{4j} = X_4$
Access	ΔX_{51}	ΔX_{52}	ΔX_{53}	$\Sigma \Delta X_{5j} = X_5$

Source: Berge (2002)

Resource bundling to create viable farms

The most extensive bundling of resource rights occurs when ownership of the ground implies ownership of everything attached to the ground or flowing over the ground (usually referred to as 'dominium plenum'). The “high modernist” perspective guiding development strategies has taken for granted this assumption about property rights.

But rights to resources in an ecosystem are not inherently bundled. It is not uncommon for rights to be unbundled in resource specific ways and held by a variety of actors. Individuals or groups may hold rights to access an area (e.g., a wildlife area) and extract resources (e.g., hunt game), for example, but a government body often has the authority to make decisions about quantity regulations (e.g., the maximum number of animals killed by hunters each year). Other actors may hold rights to pasture, or to timber, and the role of the government will vary across resource types. The individual, group, or association that holds rights to any given resource (e.g., game) need not have rights to other resources in that ecosystem.

In history many systems of rights of common, such as in England and Scandinavia, can be seen as efforts to bundle resource rights with the goal of making farms viable economic enterprises (Berge 2002). Fritzboeger (1994) observes in Danish history cases where some had rights to the tall trees while others had rights of pasture. As the number of animals increased the regrowth of the forest was hampered. Land consolidation and bundling of rights resolved the problem.

The “thing” brought back into the theory of property rights

The values and goals seen in the objects of ownership can be interpreted in terms of the kinds of goods perceived to inhere in various types of commodities and services. These goods are of four types: private goods, common pool goods, club goods, and public goods.

Table 1.5
Typology of goods

Resource is	Appropriators are:	
	excludable	non-excludable
Subtractable/ divisible	PRIVATE	COMMON POOL
Non- subtractable/ indivisible	CLUB	PUBLIC

Source: adapted from Ostrom and Ostrom (1977). Instead of club good they talk of "toll good".

Cornes and Sandler (1986) provide an interesting discussion of public and club goods in the context of externalities. I have argued elsewhere (see NOTE 3 below) that this typology of goods gives us analytical categories, which may describe aspects of the *utility* of real world products, not necessarily the physical goods themselves. Thus, there is considerable room for political choice about the degree to which some real world product shall be treated as private, common pool, club, or public, or as a mixture (Berge 1994)). Thus I disagree with McKean (2000)'s position that the nature of a good in general is a physical fact, given the technology. This is only part of the story. The nature of the good is also open to political choice and symbolic manipulation, sometimes with a vengeance if the physical

characteristics of the good are disregarded.

In the act of specifying property rights, the question faced by a governor is not just the technical feasibility of exclusion, or the economic return from subtraction, but also their moral desirability and political feasibility. Several recent studies of property rights emphasise their embeddedness in a political system and emergence from a political process (Brouwer (1995), Sened (1997), Hann (1998)). Thus the definition of property rights as being one or another type is an interesting fact in itself, and should be expected to vary among societies.

Subtractable used about a resource means that harvesting or appropriating from the resource by one user diminishes the amount available for another user. The use of “private” and “public” as labels of goods should not be confounded with the same labels used about types of owners. Here they are labels used to denote analytical characteristics of a good important for the collective action problems experienced by actors wanting to coordinate their goals. The most important difference is the type of externality generated by the appropriators of the good.

An example: rights to go for a walk in the wood

Walking in the wood can be seen as a good. You appropriate it by actually walking in the wood. But what kind of good is it? It is technically excludable, but it may in many cases be very costly to exclude, like it is for many common pool resources. It is in general non-subtractable, but will be affected by crowding. Thus it may be either a club good or a public good with utility modified by crowding.

Who holds the rights to walk in a particular wood? In Norway the right belongs to any person who legitimately stays in Norway². In England it belongs to the owner of the land except where custom or contract allocates it otherwise.

Crowding/thinning and management of externalities

There is nothing inherent in the nature of “walking in the wood” which might be used to “solve” the problem of assigning the right to any

² See LOV-1957-06-28-16 Lov om friluftslivet (friluftsløven)

particular person. But with increasing crowding there will be an increasing number of externalities affecting other goods in the wood. At some point the cost of these externalities may be high enough to make the cost of exclusion reasonable. Assuming the crowding is real and not just theoretically possible, at what degree of crowding does this happen? Real evidence seems to be missing. All arguments end up with a political “choice” at some point in history.

But for the present discussion there is one interesting aspect to the different choices in Norway and England. In Norway the right of access to woodland is conceived as separate from the land. In England it is bundled with the land.

Externalities

An activity generates an externality if there is an unwanted material consequence for actors not taking part in the activities generating the consequence. In common pool resources the externality is of the queuing type causing competition among appropriators and distribution problems between those first in the queue and those last, but without affecting the utility of the good appropriated. In club goods the externality is of the crowding (or thinning) type. This type of externality produces distribution problems in relation to non-members and causes threshold effects in the utility of the good. By setting the number of club members to something near the threshold, the utility of the good can be preserved. But equity problems between members and non-members have to be addressed.

It should be kept in mind that these are analytical categories. Real world goods such as pasture, wildlife, timber, or biodiversity will usually be a mixture of the various types of analytical goods, and thus the property rights to the resource need to solve the particular mix of externality problems found in each case. We must also see that the problems of exclusion and subtractability as well as the characteristics of the externalities are shaped in profound ways by the technology used in the appropriation of the good. What actually happens in forest activities depends not only on the institutions but also on the available technology, including knowledge about how to transform resources into something more desirable.

An interesting case where technology helped solve the crowding problem is the radio spectrum where allocation of frequencies for transmission of signals created enormous problems for communication. New technology combined with management solutions similar to modern commons management has basically resolved the problem (Berge and Kranakis 2011).

Types of resources and types of owners

It is interesting to note that the various types of resources thus identified have a certain correspondence to the types of owners discussed above. In particular it would seem that a pure club resource might be suitable for common ownership. A pure public resource would need no ownership, and a pure common pool resource would, perhaps, require state ownership.

Transaction costs

Most real resources will contain aspects of more than one of the types identified. The distinctions are, however, important for the design of property rights in that rules of transfer must depend on the possibility and cost of excluding some non-owner from the resource (the transaction costs and possibilities for generating externalities from enforcing a contract of transfer of rights). And it must take into consideration to what degree the resource (or more precisely the value of the resource) is divisible. If the value is indivisible it is most probably inalienable as well (like knowledge or skill once acquired). Conversely considerations of entitlements and equity may lead to considerations of inalienable rights. The rules defining and protecting such rights then has to conform to the rules governing club resources and public resources.

Property Rights Regimes

Four types of regimes are usually found and labelled individual private property, state property, common property and open access.

Individual Private Property Rights

This is the ordinary everyday concept of property applied to private citizens. There is a single decision maker known as the owner exercising all rights, privileges, powers and immunities of an owner.

State Property Rights

In discussing state property rights it is focused on their public character. They are by some seen as being held in trust for the people and should be managed by the wise and well-intentioned state bureaucrats for the greatest good of the greatest number of people. Others have focused on the inherent difficulties in designing rules to do this even in the best of circumstances. The many examples of states with corrupt servants making state property into something best described as open access or even their own private property, should warn against too much faith in the state in general (Ostrom 1993).

Common Property Rights

In the discussions of private and public property, the common property rights are by some seen as the ideal combination of private and state aspects of property, and by others as getting the worst combination of the two. It is well within the probable that all arguments about the virtues and shortcomings of common property may be true in some specific context and with some specific combination of rights and duties as defined by some specific political system. It is impossible that all arguments can be true in general (Ostrom 1990).

Open Access Regimes

For a resource with open access, nobody is vested with the rights, privileges, powers and immunities of an owner. This means that all benefits from the resource are open for appropriation by anyone willing and able to do so. The distinction between open access/ no ownership and common ownership is important. Eggertsson (1990, 36) uses the label "communal property" for what here is called common property and "common property" for what here is called open access (no property). Also Waldron (1988) uses "common property" to denote an open access resource.

The logic of the utilisation of a "common property resource" (Warming (1911), Gordon (1954), Scott (1955), Hardin (1968)) in the sense used by Eggertsson and Waldron applies in reality to the resource with no ownership and no effective regulations, the open access resource. For a true common property resource the logic will apply only under particularly specified circumstances.

Needless to say, the open access resource is a vanishing specie except for the atmosphere and the oceans outside territorial boundaries. The atmosphere is an open access resource. During the period 1950-1990 several efforts at creating a regime governing the use of the atmosphere resulted in nothing. The effort was mostly fuelled by a concern for its use by airplanes and later on the need for finding suitable spots for satellites. By the 1990s the concern with pollution affecting climate had emerged. But there was no system of governance. Buck (1998) in her discussion of global commons concludes that the atmosphere is not a commons, but a common pool resource, or an open access resource in the terms used here. Since Hardin (1968) such resources have been known to be susceptible to destruction. Users of such resources are confronted with a social dilemma and may easily slide into a social trap (Ostrom 2005). This is the situation today for gases furthering a warmer climate.

Types of actors, types of goods and types of regimes

The first approximation to the question of who the owners are, introduced the distinction between individuals, various types of collectives, and the state. This distinction was behind the classification of property rights regimes into private, common, and state property rights regimes. Above we discussed the various types of goods one might find in the “things” owned: private goods, common pool goods and public goods.

Putting the concepts besides each other like below might suggest there is a one-to-one correspondence of type of actor, type of good and property rights regime. But that is misleading. McKean (2000) points out that a lot of conceptual confusion can be traced to the use of “public” and “private” to distinguish types of actors, types of goods, and types of property rights regimes.

Table 1.6

Types of actors, types of goods, and types of regimes

Type of Actor	Type of Good	Property Rights Regime
Private (Individual)	Private	Private
Public (Collective)	Common Pool	Common (public)
State (Public)	Public	State (public)

Source: McKean (2000)

Perspectives on systems of property rights

A property rights system can, short and imprecise, be defined as an institution determining: "Who will benefit how much for how long and in what ways from which resource(s)?" Answering the "who" question will identify who will legitimately be able to withdraw resource units and make decisions about resource management. That is: it determines who holds property rights over the resources.

According to Godelier ([1984] 1986, 76) "the concept of property may be applied to any tangible or intangible reality", and rules of property rights will "always assume the form of normative rules, prescribing certain forms of conduct and proscribing others under pain of repression and sanctions". But he also warns "Property only really exists when it is rendered effective in and through a process of concrete appropriation." (p. 81). In order to understand and appreciate Godelier's warning here we must consult Searle (1995). Searle is not preoccupied with property but with how our beliefs about the world come about, including beliefs about property rights (see more in Meidinger (2008)).

Property rights in the means of production are usually recognized as one of the major institutions of a society. In Marxian social science the relations of production (i.e. the distribution of property rights) is seen as one of the major institution of society defining among other things the class divisions of society (Elster 1985). However, property rights as such seem to have been taken as rather unproblematic.

Giddens (1981, 113), for example, writes:

"The concept of "property" was never analysed by Marx, and it would be necessary to discuss it at some length were one to attempt a satisfactory elucidation of the notion. For my purposes here it is enough to specify a minimal categorization of how "property" might be analysed. First of all, *property has a content*, property is something. The chief form of private property in the means of production in class-divided societies is *land*, even if the formation of money capital through commerce and agriculture may be a far from negligible phenomenon. In capitalism the main forms of private property are factories, offices, machinery, etc., however much land (itself capitalized) might remain a necessary productive resource. It is difficult to underestimate the sociological significance of this difference, and Marx provides us with a framework for analysing it - again, especially in sections of the Grundrisse³.

³ Marx (2008 [1858])

"Property", of course, also implies normative rights of control of material resources. Here we can usefully recognize variations in the level and types of alienability of resources."

I think Giddens' critique of historical materialism might have profited from a more thorough understanding of the concept of property. Anthropological and historical research has demonstrated that property rights systems are not immutable structures. They change and transform in response to more pressures than the forces of production. Sometimes it may be appropriate to speak of a de facto development of property rights even though the particular rights as yet are unrecognised by the law as property rights. This might be the case for some developments in organized labour-capital relations, social security; compare e.g. Reich (1964), or the rights, privileges, powers and immunities of the members of the more successful professions; e.g. Perkin (1981).

Property rights concerns the practices, rules and beliefs which determine who will get which benefits from which resources. Property rights "help man form those expectations which he can reasonably hold in his dealings with others" (Demsetz 1967, 347). This means that property rights are a central part of human interaction. Even in situations where the actual on-going interactions have nothing to do with the distribution of benefits, one can see that the prevailing property rights affect the framework of interaction at least by defining and infusing the space-time setting of the interaction with particular meanings. This view of property rights means that they are a central part of all social institutions and that institutional change means changes in property rights.

Eisenstadt (1968, 410) defines social institutions as "regulative principles which organize most of the activities of individuals in a society into definitive organizational patterns from the point of view of some of the perennial, basic problems of any society or ordered social life".

Bromley (1989a, 77-78), thinking of economic institutions, finds that they may be defined as the sum of "consensual arrangements or agreed upon patterns of behavior that comprise conventions", and the "rules and entitlements that define - with both clarity and obvious sanction - individual and group choice sets".

Stinchcombe (1997) reminds us that for a rule system to become an institutions

it needs guardians charged with the interest and authority to monitor and enforce the rule system. At the most elementary level the people who devise the rules may do so themselves. In modern states we in most cases expect to find a bureaucracy.

Bromley arrives at the institutional structure of society as the fundamental variable to study in order to understand the dynamic of the economic system. The study of social institutions seems to be the meeting ground of sociologists and economists (Swedberg 1987). But compared to e.g. Schotter (1981) and Williamson (1975), Bromley has come much closer to the sociological concerns with distributions and social justice as fundamental aspects of social institutions.

According to Lewis (1986, 58): "A regularity R in the behavior of a population P when they are agents in a recurrent situation S is a convention if and only if it is true that, and it is common knowledge in P that, in any instance of S among members of P: (1) everyone conforms to R; (2) everyone expects everyone else to conform to R; (3) everyone prefers to conform to R on condition that others do, since S is a coordination problem and uniform conformity to R is a coordination equilibrium in S."

Theoretical studies of property rights

The academic study of property rights has concentrated on resolving the relative merits of simple systems of private individual rights compared to systems of common property.

The works, particularly those by Coase (1937, 1960), Alchian (1965), Demsetz (1967), Alchian and Demsetz (1973), Williamson (1975, 1981), Posner (1972), North and Thomas (1973, 1977), and North (1990) have been associated with the emergence of a property rights perspective on institutional development (Bromley (1989a, 12), Bardhan (1989, 3-17), Eggertsson (1990, 33)).

It should be added that also Bromley, Bardhan, and Eggertsson (strongly influenced by North) are contributors to this tradition. While Bromley (1989a) and Eggertsson (1990) mainly present their own approach to institutional economics, Bardhan (1989) distinguishes three approaches to the role of institutions in economic development: 1) the Marxian approach, 2) the CDAWN approach (named after Coase, Demsetz, Alchian, Williamson,

and North) focusing on the role of transaction costs, and 3) the imperfect information approach referring to Akerlof and Stiglitz: see e.g. Akerlof (1970) and Stiglitz (1985).

One important result was to see the distinction between the open access resource and the resource managed as common property (Ciriacy-Wantrup and Bishop 1975). While open access resources are without any management regime and tend to become destroyed as predicted by Garret Hardin's (1968) metaphor of "The tragedy of the commons", resources owned in common or as private individual property are indistinguishable in the theoretically simple situation of (1) perfect information, and (2) no transaction costs (Baland and Platteau 1996). However, it is recognised that in the real world available information is far from perfect and transaction costs are considerable. Particularly information about the status of resources tends to be skewed towards the short term and directly observable. Slow and not so easily observed changes often come as surprises. This is as much a problem for local community management as it is for private individual and even state management. In addition, the larger the ecosystem to be managed is, the more complex is the information available. And if it is available at all, the cost of implementing it in a management system is considerable.

The problems encountered in the management of the forest lands can be said to have its origin in co-ordination problems constrained on the one hand by ecosystem dynamics and on the other hand by considerations of equity among owners. Due to the multiplicity of activities and the diversity of actors, their activities need co-ordination.

Collective action refers to activities that require the co-ordination of efforts by two or more individuals (Olson (1965), Hardin (1982)). Collective action becomes problematic for a group of people when their actions are interdependent: when one person's reward is dependent on the actions of others (Axelrod 1984, 1997). Independent choice in an interdependent situation is called a social dilemma. Social dilemmas are situations where what seems to be the best course of action from one actor's point of view will, if pursued by all actors, lead to results considered worse than feasible alternatives. The exact character of a social dilemma is thus shaped by value systems,

technology and resource characteristics (North 1990, Ch2).

Collective action problems appear at two levels: First in recognising the necessity of coordination and regulation of behaviour. Second, the problem appears in making the rules of regulation, and of monitoring and sanctioning behaviour governed by the rules. Designing a system of property rights to some particular resource (e.g. fish) has been studied as a problem in collective action, particularly in connection with the management of open access resources (Taylor (1987), Ostrom (1990), Sandler (1992), Ostrom, Gardner, and Walker (1994)). The development of game theory has been a decisive tool in these studies (Gintis 2000, Camerer 2003).

The general problem consists in supplying public goods in “optimal” quantities. Rules and their systems of monitoring are called institutions. Institutions are public goods. Public goods, club goods and common pool goods are in simple models of collective action prone to under-supply due to incentives of free-riding. The problem of supplying such goods at socially optimal levels has been extensively studied with formal models, experimental studies, and field studies. There is a discrepancy between theoretical predictions of standard models and observations from field studies. The levels of cooperation are higher than expected even though less than optimal. Experimental studies confirm this and suggest that the formal models could be improved by including concepts such as “trust”, “reputation”, and “reciprocity” (Gintis et al. (2005), Fehr and Gächter (2000), Berg, Dickhaut, and McCabe (1995)). A group with a higher level of trust, stronger norms about reciprocity, and members with better reputations for being trustworthy will more easily overcome social dilemmas and take collective action.

In economics there is an implicit focus on exclusion and alienation in the emphasis on efficiency in the allocation of productive resources. Tietenberg (2000) describes the structure of property rights necessary to produce efficient allocations in a well-functioning market economy. Well defined property rights have the following characteristics:

- exclusivity – all benefits and costs accrue to the owner,
- transferability – all property rights should be transferable through

- a voluntary exchange, and
- enforceability – property rights should be secure from seizure or encroachments by non-owners.

The importance of the allocation of property rights has not always been acknowledged. Coase (1960) argues that in a neo-classical economy (with zero transaction costs) «free» trade in assets will always lead to an optimal resource utilisation. Hence, allocation of property rights does not matter for efficient outcomes, while any restriction on trade will be detrimental to it. Stigler (1989) labelled this result the «Coase Theorem», and many economists seem to stop reading at that point. However, Coase recognised the limitations of the “theorem”. The assumptions require that all actors are rational and possess complete information about all other actor’s preferences and strategies, and that transaction costs and wealth effects are zero. Recognising this, the conclusion by Coase (1991) and neo-institutional economists (North (1990), Eggertsson (1990)) is that politics, institutions and distribution of rights do matter. The impact of restrictions on alienation is far from obvious, not even for the efficiency of the economy.

Social science outside economics has used a more empirical approach. Studies of so-called "primitive" societies show elaborate social structures regulating decision making and utilisation of common property resources (Berkes 1989). The development of legal systems of complex societies also show that the first problems they set out to regulate among owners of common property are decision making on utilisation and exchange of rights to the resources. The law gives the owners the necessary rights and powers to set up a "government" at the same time as it protects the individual owner against misuse of the power vested in such governments. The actual problems of governance of common property, and the need for the legal backing, will depend on the number of co-owners. Where the number of owners is small, it seldom is a problem (Ellickson 1991). But in many countries, all or a large part of the land is in principle a "commons" or in state ownership. The larger the number of "owners" the more the utilisation process will resemble the utilisation problems of the open access resource or the higher the policing costs will be. For once a government is installed; its costs have to be covered. The problems of taxation appear.

The institutional perspective on property rights

Starting out with a review of different definitions of property rights we are arriving at an institutional perspective on property rights and economic organisation. The theoretically interesting studies of institutions published during the last decades (until about 2000) are many more than can be discussed here. But for the record: Some of the studies not mentioned so far that may inspire are March and Olsen (1984, 1989, 1994, 1996), Ostrom (1998, 1999, 2000), Williamson (1996), Knight and Sened (1995), Denzau and North (1994), North (1999).

These have to be returned to in future studies.

A note on the use of concepts like commons versus common pool resource

Some of the more commonly used concepts of science do not have clear boundaries. Consider for example 'cause' and 'causation'. In fact, most concepts in natural languages do not have clear boundary rules. Meaning is established by usage rather than by definitions. Over time their meaning will change, mostly without being noticed by the users of the language. Even if the language of science is different in some respects, it is surprisingly similar in most of its dynamic. Core concepts are not well defined, meanings are established by usage, evolve, and change across generations of users.⁴

In my view “commons” refers to a basic concept with a strong core speaking to and being understandable for most people, but without clear conceptual boundaries. While most people will be able to point to a commons they readily recognise, any two persons from different institutional contexts may have to discuss at some length to agree on similarities and differences in the classification of their favourite commons. It would seem reasonable to call it a fuzzy concept.

On the other hand, ‘common pool resource’ is seldom used in ordinary discussions, but it is a central concept in our theoretical discussion. This concept is well defined by a technical language in terms of subtractability and exclusion. Once definitions of subtractability and exclusion are accepted, the abstract idea of a common pool resource is clear with sharp boundaries. However, this may not always translate into easy identification of an object in the real world. Agreeing on whether any specific resource is or is not a common pool resource

⁴ Ostrom (2005, Ch6) presents an illuminating discussion, and clarification, of the concept of "rule".

may sometimes be as hard as to agree on whether it is a commons. It will depend on how you understand subtractability and excludability.

The institutional structure giving meaning to subtractability and exclusion is not included in the definition. Nevertheless, it is there implicit. Are, for example, real world examples of subtractability and exclusion defined independent of technology and transaction costs?

Detailed investigations of the institutional structure governing each resource may be needed to determine whether the resource can be said to have common pool characteristics or not. In empirical work the clarity of the technical terms evaporates.

NOTE 2

Erling Berge:

A property rights perspective on institutional change in the welfare state⁵

Introduction

Sociological theory is remarkably short on references to property. By widening our interest from the theoretical status of the concept of property to property taken in its everyday generalized meaning as amount of capital, we find considerably more. See for example Newby et al. (1978) or Hollowell (1982). Both Newby and Hollowell raise interesting theoretical issues. But even so the main thrust of their books goes towards describing property in its everyday meaning. The only significant theoretical tradition is found in Marxism where property rights in the means of production are taken as the most basic division in society. The Marxist tradition is described by Roemer (1988, Ch8) and a non-Marxist tradition is found in Stinchcombe (1983). However, the theoretical significance of the historically contingent status of property rights (e.g. Simpson (1986) and Macfarlane (1978) on historical development; Schlatter (1951) on cultural development; and Godelier ([1984] 1986) on cross-cultural variability) and the implications of this have not, it seems, been properly appreciated among those concerned with the theoretical development of sociology. In economics this has been a topic within the 'property rights paradigm' (e.g. Furubotn and Pejovich (1974), North and Thomas (1973), Bromley (1989a)).

Both the actual content of property rights and the cultural meaning of them have as much variability as any social phenomenon. The present essay will argue that the particular manifestations of those rights recognized as legitimate property rights, have to be modelled as an evolving part of the total social system. Because of the close connection between property and concepts like power and freedom, this view has some interesting implications for the sciences of planning and government. The present essay will attempt to investigate a few of them. They range from privatization of public activities by way of management of professions to resource utilization and sustainable development.

Our everyday conception of property is clear in its main implications. A

⁵ This paper is an updated version of the "Introduction", page 1-6, in Berge (1990c).

hypothetical opinion poll about the differences between mine and "thine", or what I can do with mine, what you cannot do with mine, what you can do with yours and what I cannot do with yours would reveal fairly unanimous opinions. Snare (1972) has investigated the meaning inherent in the everyday concept of property (see above pp. 9-10). He found it could be described by six types of rules, three defining the rights of the owner and three types of rules regulating the relation between owner and non-owners:

Table 2.1

The everyday ideas of property rights

Owner rights:	
1	The owner has a right to use his property, meaning, a) it is not wrong for the owner to use his property, and b) it is wrong for all non-owners to interfere with the owner in his use of his property,
2	Non-owners may use the property of the owner if and only if the owner gives his permission, and
3	The owner may permanently or temporarily transfer his rights as defined by rules 1 and 2 to specific other persons by consent,
Relational regulation:	
4	Punishment rules: regulating the cases where non-owners interfere with an owner's use of his property.
5	Damage rules: regulating the cases where non-owners cause damage to someone property, and
6	Liability rules: regulating the cases where someone property through either improper use or neglect causes damage to the person or the property of some person.

Source: Snare (1972, 202-204)

Most people would no doubt recognize these propositions as a rather obvious description of their everyday world. If, however, one asked about the purposes of property: why do we have such a thing as "property", most people would be at a loss for an immediate answer. Prompting farmers and landowners to justify their possessions, Newby et al. (1978) found four types of justificatory ideologies called capitalistic, individualistic, collectivistic, and altruistic justifications. Those turning to capitalistic justifications emphasized that their property was reward for hard work and risky investments. Those using individualistic justifications compared the large estates to everyday possessions like clothes or cars. The collectivistic justifications argued that wise management of property created work and income for many people besides the owner. And the altruistic justifications saw the owner only as a steward for future generations. It is no coincidence that these are the main arguments used by philosophers to justify property (Hobbes ([1651] 1987), Locke ([1690] 1986), Mill (1976, Ch13), Proudhon (1840), Tawney ([1921] 1982), Macpherson (1987), Schlatter (1951), Reeve (1986)).

The question of why we have property has been on the agenda of philosophers for a long time without being resolved to the satisfaction of most scholars. No doubt it will remain on the agenda in the future as well. To this debate also 'a sociology of property' might have something to contribute.

At the outset it will be necessary to distinguish between three concepts of property: property as understood in the everyday world of common people (the everyday concept of property), property as understood in the jurisprudence of property (the legal concept of property), and property as understood in the social sciences (the social science concept of property).

These different conceptions of property are successive generalizations of the former. They are nested in that the legal concept of property builds on and implies the everyday concept of property in the same way as the social science concept builds on and implies the legal concept of property.

Snare (1972) in his investigation of the everyday concept of property provides a bridge between this concept and the legal concept. Snare does not seem to be aware of the writings of Hohfeld (1913, 1917). Hohfeld introduced to jurisprudence the concept of a legal right (and hence also a property right) as an asymmetrical relation between the owner (the right holder) and all others (non-owners) characterized by four pairs of different types of rights and duties

Table 2.2
Hohfeld's ideas of legal rights

	<u>IF OWNERS HAVE</u>	<u>NON-OWNERS HAVE</u>
Use aspects	1. claim-rights	duties
	2. privileges	no rights
Exchange aspects	3. powers	liabilities
	4. immunities	no powers

Source: Hohfeld (1913, 1917)

The claim-rights, privileges, powers, and immunities, the duties, no rights, liabilities (liability here means susceptibility to having ones legal position as owner/ non-owner altered by someone else), and no powers are all tied to actions and transactions: what owners are allowed to do or not do, what non-owners are allowed to do or not do, and how the power of the legal system may help the owners to protect and exercise their rights.

Hohfeld's conception of the relation between owner and non-owner also contains the negation of the relation as seen from the owner's position:

Table 2.3

Hohfeld's ideas of legal rights and their negation

	THE OWNER/ NON-OWNER RELATION		ITS NEGATION	
Use aspects	1.	claim-rights	duties	no-rights
	2.	privilege	no rights	duties
Exchange aspects	3.	powers	liabilities	no-powers
	4.	immunity	no-powers	liabilities.

Source: Hohfeld (1913, 1917)

It is easily seen how the 6 rules described by Snare can fit into the more abstract scheme of Hohfeld. However, the legal concept of property seems to have lost touch with the everyday conception which sees property as a "thing" even though it obviously implies this in its actual application. In its abstract focus on the relation between members of a society the law had to leave out the property as a thing in order to achieve its main task of bringing justice to the transactions among people.

In the social sciences concerned with societal development this is no longer possible. Property seen as a "thing" has to be brought back in. But the "thing" brought back in is even more abstract than the relational concept of property. Economists might say that the abstract "thing" is the goods and bads of everyday life, the utilities of social actors. Sociologists might say it simply is concrete and effective rights as these are actually distributed in a society. Godelier ([1984] 1986) tries to summarize this: "property rules ... always assume the form of normative rules, prescribing certain forms of conduct and proscribing others under pain of repression and sanctions." (p.76), and "a form of property only exists when it serves as a rule for the concrete appropriation of reality."(p.81). The crucial distinction between the legal conception of property and the social science conception is best seen by focusing on property seen as concrete existing, effective rights used in the everyday appropriation of reality (for more on the nature of rights: see Coleman (1990b)). The legal conception is concerned only with those rights

recognized by the law as property rights. Rights given the status of property rights by the law are treated differently from other rights. The procedures in court are different. The remedies granted the rights holder is different. The restraint shown by the state in interfering with these rights are often remarkable.

In contrast to this the social science conception of property also includes rights not currently recognized as property rights by the law, provided the rights actually exist and are used in the everyday appropriation of the world. This opens the possibility for studying changes in property rights: the emergence of new rights, how people exercise their new rights, and finally the recognition of their new rights by the legal system as property rights.

This conception of property rights also may begin to justify the title chosen for this essay: "a property rights perspective on institutional change in the welfare state". One of the remarkable things of the welfare state is the speed with which new rights have emerged and the quantity of them. At the outset the rights granted by the welfare state have not been seen as property rights, but many of them have become so, de facto. The problems of this situation have been debated at least since Reich (1964) called attention to "The New Property": the grants of government largesse which the welfare of many people had come to depend on. The same debate has been going on in Norway at least since the 1920s, fuelled by legislation concerning regulation of business activities and prices (Øvrelid 1984). However, the theoretical connection between the problems debated and the property rights theory were not recognized. It is interesting to note that the most intense debates were provoked by single cases where the rights and remedies of individual citizens were in opposition to the rights and needs of the society as interpreted by the government Øvrelid (1984, 110), just as emphasized by Godelier ([1984] 1986, 81).

The present essay is not an attempt to solve any of these problems. Instead it is an inquiry into the conceptual foundations of the various problems involved. It is a kind of preliminary study necessary before an empirical investigation can be undertaken. The investigation can be said to be based on three rather simpleminded questions:

- is there any regularity in the kinds of objects (i.e. rights or goods) that can be made into property?
- is there any regularity in the types of subjects which may hold property (types of owners)?
- is there any regularity in the rules delineating owners from non-owners?

The answer to the last question is already mentioned above in the comments on the relational conception of property proposed by Hohfeld.

The answer to the first problem seems to be no. Historical and cross-cultural studies seem to show that while there within a society may be clear and coherent rules of what can be made into property, for the general case there are absolutely no consistent classification of what can be recognized as property and what cannot. The most one is able to say is that if something is abundant; people will usually not bother to make it into property. Confining our attention then to the welfare state, some interesting aspects of welfare goods are discussed under the labels "private goods, positional goods, club goods, and public goods".

The second question leads us to the answer that three different types of entities will usually be recognized as owners: a state may hold property, properly defined and legally recognized groups (most often villages, tribes or families, but in modern economies also companies, foundations and similar legal entities) may hold property, and individuals may do it. Corresponding to these types of owners one speak of state property, common property and private or individual property since the rules delineating owners from non-owners often differ for the various types of owners.

The difficult part, however, is to combine the partial insights from different studies to achieve a coherent picture of how definition and distribution of rights interact with established structures to produce a changing institutional system. Two essays tries to approach this problem, one on the regulation of professional organizations considering a profession as a property rights system, and one on the management of resources without owners (often called common property resources).

NOTE 3

Erling Berge:

On the nature of welfare goods⁶

Welfare goods

What is meant by "welfare good" is seldom spelled out precisely. It should, however, not be confused with collective goods (Mishan and Mishan 1981) or public goods (Samuelson 1954). Mishan prefers collective goods as the designation of what usually are called public goods. Since Samuelson's definition of a public good as a good where person A's consumption of the good did not interfere with person B's consumption, the public good concept has evolved, but the label, despite Mishan's effort, has stuck.

Welfare goods are provided by a public agency to consumers (the public) free or at a cost below production cost. Huttman (1989, 1) defines "Welfare commodities" as "encompassing goods and services extended to consumers free of charge or at varying user fees and charges scaled below costs...". This definition presumes that the welfare good is a particular product somehow desired by the consumer and will thus exclude goods like pensions or aid in the form of cash. One may, however, think in terms of a generalized welfare good like "minimum standard of living" and look at the aid in cash as a public subsidy toward this good.

The below cost requirement implies that the consumption of the welfare good will not have the same distribution as the distribution of income, which determines the distribution of consumption of goods supplied at full cost. The aim of providing a welfare good is usually to achieve a redistribution of goods, measured for instance against what the distribution would have been with full cost provision, to increase the total welfare of the society.

There are several traditions where the study of the distribution of welfare goods is important. During the early 70ies quite some effort went into the establishment of social indicators and a system of social accounting. This established a tradition of publishing social surveys. Another tradition is focused on the level of living surveys conducted regularly in several countries.

⁶ This is a slightly modified version of a paper published in 1991 in *Sociologisk Årbok* 7:55-73 (Berge 1991a).

Comprehensive studies focusing particularly on welfare goods are more uncommon. The most relevant studies are usually focused on a single welfare good (e.g. Whitehead et al. (1988) on health care services, Lundqvist (1986) on housing, Bloch (1974) on police services). Le Grand (1982) provides an assessment of studies of the distribution of public expenditure on health care, education, housing and transport. He notes "Unfortunately, there is no statistical evidence concerning the distributional impact of the personal social services" (p.18) or directed at the evaluation of the overall objective of more equality in the distribution of welfare (e.g. Korpi (1978), Ringen (1987)). Even by economists the question of who gets which benefits with respect to welfare goods has not been addressed in the same way as the consumption of ordinary goods. At least this is the impression conveyed by Deaton and Muellbauer (1980) in their survey of consumer behaviour.

For the present study we shall look at welfare goods as anything provided to the consumers (the citizens of a state) at a price below production price with the intention of achieving a more equitable distribution of welfare among the citizens of the state.

A typology of goods

The distinction between public and private goods (Cornes and Sandler 1986) defines categories of goods according to whether the consumers are excludable (person x can be excluded from the benefits) or non-excludable (person x cannot be excluded from the benefits) and whether there is rivalry or non-rivalry in the consumption of the good. That means benefits are divisible or indivisible. Baumol and Oates (1988) call this distinction depletable or undepletable. But they are not quite consistent in their terminology. "An undepletable externality is thus one for which consumption by one individual does not reduce the consumption of anyone else." (note 15, p.19). The preference here for divisibility vs. indivisibility has its background in property rights theory and the possibility of assigning property rights to a good.

Table 3.1
Types of goods available for the welfare state

	Consumers are	
	- excludable	- non-excludable
Benefits are	<i>private</i>	<i>positional</i>
- divisible	<i>club</i>	<i>public</i>
- indivisible		

Source: Table 1.5 above

1. Private goods

Private goods are excludable and have rivalry in consumption. These are the ordinary consumer goods which one can buy in a market.

2. Public goods

Public goods are non-excludable and have non-rivalry in consumption. A typical example of a public good may be the protection given by NATO's fleet of Trident submarines with nuclear weapons. Some would perhaps rather call the nuclear weapons a public bad, but the logic of the argument is symmetrical to good or bad. The nature of the pure public good is such that if the good is produced at all, it will be available to all whether they pay for it or not. If NATO is able to protect one country, all countries will be protected. This is so because there is no way of, either theoretically or practically, excluding any person or province from the protection. The realization that this was the case for an important class of goods, and the concomitant free rider problem in collective action (Olson 1965), led to important theoretical developments for public policy (Cornes and Sandler 1986).

This definition of public goods means that there are just three ways a public good can appear. A public good (or bad) may

- appear by itself as natural phenomena (e.g. a beautiful sunset or a violent storm), or it may
- appear as a by-product (unintended consequence or externality) from other social processes (e.g. solidarity or anomie), or it may
- appear because everyone (or at least enough people) contributes voluntarily or by force (taxation) to its production. Sociologists have

concentrated more on the problem of how public goods come to be provided than how they are consumed. (For developments in the theory of collective action see e.g. Hardin (1982) or Marwell, Oliver, and Prahl (1988)).

This definition of pure public goods also implies that they are not welfare goods as defined above. They are delivered to the citizen at their full price, collected by the general tax. Only if there is inequality in the consumption of a pure public good and only if this inequality is not a result of free choice by the consumer, can the good be called "a welfare good" (perhaps straining the term a bit) since then the consumer not being able to consume according to his or her preferences will have, through taxes, contributed a subsidy of the good consumed by all those being able to consume according to will.

3. Club goods

Those goods which are neither pure public goods nor pure private goods are called impure public goods. An interesting type of public good found both among pure and impure, is the merit good. The basic characteristic of a merit good is that it reflects the preferences of an elite or ruling group and is imposed on (or prohibited from) individual consumers Judge (1979, 375).

Goods which are excludable and at least partly non-rival in consumption have been called club goods by Cornes and Sandler (1986). It was called toll good by Ostrom and Ostrom (1977). Partly non-rival means that the initial situation is one of non-rivalry. It can be called a club good because of the nature of the exclusion mechanism. The exclusion mechanism is like a boundary. You can partake the club good once you are within the boundary. Once you are inside the boundary the good has the character of a pure public good. As long as the number of members in the club is below "the carrying capacity" of the club, the club good is available to all. The expression "carrying capacity" is deliberate and alludes to the ecological concept and its relation to crowding and the tragedy of the common. But as the number of members increase crowding will lead either to deteriorating quality of the good or competition for access to the good. A decreasing number of members may lead to analogue problems of thinning: there will be too few to share the cost of keeping up the quality of the services and eventually competition to exit before the market in memberships collapses completely

(e.g. selling the house before the price goes down too far). The road system illustrates the problem of crowding. The road system today is a club where title to a car (and sometimes willingness to pay the road-toll) is the membership card (and explains Ostroms' choice of "toll good" as their term for the concept). As the number of members who use the club increases, crowding leads to slowdown in traffic (deteriorating quality of the product) and dangerous driving (competition).

It is worth emphasizing the necessity for members to enter and use the club. Unlike pure public goods, club goods have a voluntary element in so far as it requires an intentional act of the consumer to appropriate the good.

4. Positional goods

Goods with rivalry in benefits, and where the consumer is at least partly non-excludable, are not, like club goods, explicitly labelled by Cornes and Sandler (1986). One might perhaps call them "impure private goods". Taylor (1987, 6), discussing the definition of public goods, observes: "divisibility does not entail excludability, although important examples of non-excludable, divisible goods are not easy to come by: economists have suggested such examples as a garden of flowers, whose nectar can be appropriated by individual bees but particular bees cannot be excluded from consumption." The pure case of a non-excludable and divisible good may not be found to exist in itself, but then few important goods do. Actual social contexts may impose the characteristic of non-excludability on any kind of divisible good. My choice of label, positional goods, is inspired by Hirsch ([1976] 1978). Hirsch have no precise definition of a positional good. He says "The positional economy, relates to all aspects of goods, services, work, positions, and other social relationships that are either (1) scarce in some absolute or socially imposed sense or (2) subject to congestion or crowding through more extensive use." (p. 27). He finds for example that "traffic congestion can be seen as only a special case of the wider phenomenon of social congestion, which in turn is a major facet of social scarcity." (pp.3). His conception of a positional good obviously contains both club and positional goods as defined above. The position taken here is that there is a major and consequential distinction between the scarcities of club goods and the scarcities of positional goods. Since the one type of good where the (dis)utility of spatial crowding is the main rationing method, has been called club goods, it seems convenient to put the label "positional good " on

the other where the (dis)utility of waiting time in a queue is the main rationing method. These distinctions will be elaborated below. Partial non-excludability means that the situation usually is considered to be one of excludability, but may under certain circumstances approach one of non-excludability. Non-excludability may, however, be more pervasive also for what standard economic theory would call private goods than one commonly is led to believe.

At the outset then, the positional good, in a technical sense, is a pure private good. But during its consumption something happens to make it something else. Granovetter and Soong (1986) investigate consumer interactions in the consumption of private goods and identify a "forward bandwagon effect" if someone buys a product because others already have it, and a "revers bandwagon effect" if someone stops buying because too many people have bought it. These are precisely the processes Hirsch ([1976] 1978) associated with the positional economy. In their extreme form we find the processes represented in the potlatch ceremony of some primitive peoples as well as the phenomena in modern society Veblen ([1899] 1976) describes as "conspicuous waste" and "conspicuous consumption".

The consequences of consumer interactions are such that even those who do not intend to consume, or even have not considered consumption of the products, share some of the benefits (or losses). The consumer interactions create the positional economy and make the good non-excludable: no one can escape being classified as either having the good or as not having the good. What happens seems to be some kind of symbolic transformation of the good. The pure private good is transformed to a symbol and imbued with a meaning shared by all relevant actors.

Bourdieu ([1979] 1984) explores precisely this process of consumption in his study of how the cultural production of art meets, through the "acquisition" of objects of art, the cultural production of taste to produce a system of power relations where the distinctions of taste are used to elaborate and preserve class differences: "Taste classifies, and it classifies the classifier. Social subjects classified by their classifications, distinguish themselves by the distinctions they make." (p.6). The precise qualities of an object of art become manifest only through its consumption. The context of consumption is reflected both in

the positioning of the consumer and in the positioning of the non-consumers.

A simpler example of the same process is the choice of locality for housing in a city. The relative attractiveness of various locations is translated into prices which then clears the queues for the various locations. Those willing and able to pay the most get the most attractive locations. Those with the least ability to pay get the least attractive locations. A housing lot has a position in the overall positional economy. No one can opt out of this. Similarly the latest fashion in for example clothing (or cars, or ideas, or ...) divides the total population into those adopting early and those adopting late - or never.

If carrying capacity is the key concept of clubs, queues or waiting times are the key to positional goods (and bads). A visible queue is also a signal to other potential consumers that here is something of value. Some people will join a queue just because of that. Others will start leaving the queue if they see it is getting too long. In the market, however, queues are not visible, they are translated into prices. An unexpected high price is also a signal that some think this is an item of unexpected good value. Some people will buy because of the high price. Others will decide not to buy because of the high price. The forward bandwagon effect would correspond to a positive utility from paying a high price (or being first in the queue), while the reverse bandwagon effect would correspond to a negative utility from paying a low price (or coming late in the queue). To some people it is more important to be "avant-garde" than to be economically efficient. To other people it is more important to avoid appearing cheap.

The nature of welfare goods is politically determined.

One conclusion from the discussion above is that pure public goods cannot be welfare goods as we conceive of welfare goods. The discussion of private vs. public goods in economics has focused on the nature of the public good. In most cases the nature of the public good seems to have been taken for granted: either it was technologically determined (it would be too expensive to exclude consumers) or inherent in the product itself (a beautiful sunset cannot be divided and people cannot be excluded in any systematic way). But economics has not systematically distinguished between pure public goods, club goods and positional goods. Thus they have tended to see welfare goods as some kind of impure public good.

The approach here is different. Welfare goods may - at the outset - be of any type except the pure public good. Usually there is nothing inherent in the welfare product itself which determines whether it is a private, a club or a positional good. In most cases the question of what type a welfare good shall belong to, is socially and politically defined. It will rarely be a question of technology or inherent qualities. It may even be transformed into a pure public good and thus leave the group of welfare goods. If primary school by law is provided to everyone, and everyone can be forced to attend, and the schools can accommodate all pupils free of charge, then the school system is just as purely public as the military protection given by a nuclear strike force. Places for everyone secure non-rivalry in consumption and the law making schooling compulsory secures non-excludability. Or so it is supposed to be. The aim of the welfare state was to provide a series of basic services in the form of pure public goods.

However, the increasing problems, within all welfare states, of providing both enough of the promised goods and of achieving an equitable distribution of that which is provided, suggests that there may be some unrecognized problems inherent in the whole undertaking. Nichols, Smolensky, and Tideman (1971) find that providing several queues differing only in the combinations of waiting time / user fees required by the consumers, may lead to substantial efficiency gains. But they also observe: "Our proposal may produce serious equity problems that cannot be overcome." "If equity means the same treatment for all persons, it may not be possible to improve social welfare by increasing the number of money-time pairings. If, however, unequal treatment of unequals is equitable, which seems much more reasonable, then there are unexploited possibilities for improving social welfare." (p. 322).

Since a welfare good may be of any type as discussed above, it would seem reasonable to suppose that the problems might originate in unrecognized differences in the consumption processes and their feedbacks to the various types of products.

To get a handle on this we need to elaborate on possible consequences of the consumption process.

Unintended consequences and externalities

At least since Marx's suggestions that social systems before the communist system would contain the seeds of their own destruction: "... capitalist production begets, with the inexorability of a law of Nature, its own negation." Marx (1867, 763), by way of Merton (1936)'s article on "The unanticipated consequences of purposive social action." and until Giddens (1984) observations of how unintended consequences can contribute to the "social reproduction across long periods of time" (pp.9-14), the importance of unintended consequences and their role in societal development has been emphasized. Sieber (1981) for example emphasises how unintended consequences are responsible for some of "The Ironies of Social Intervention".

However, attempts to systematically investigate the various types of unintended consequences are conspicuously absent. Sieber (1981, 52) points out that "Social scientists have shown a strange reluctance to integrate research, theory, and practice in the study of unanticipated consequences."

In contrast to this, economists, who for just as long time have been concerned with external (dis)economies or externalities, have already clarified both their concept and how to use it in theoretical analysis (see e.g. Baumol and Oates (1988) or Cornes and Sandler (1986)).

"An external economy (diseconomy) is an event which confers an appreciable benefit (inflicts an appreciable damage) on some person or persons who were not fully consenting parties in reaching the decision or decisions which led directly or indirectly to the event in question." (Meade (1973), quoted by Cornes and Sandler (1986, 29)). Baumol and Oates (1988, 17) writes similarly: "An externality is present whenever some individual's (say A's) utility or production relationships include real (that is, nonmonetary) variables, whose values are chosen by others (persons, corporations, governments) without particular attention to the effects on A's welfare."

The definition of externality is clearly some kind of unintended consequence as seen from an actor's point of view (producer or receiver). Unintended consequences of societal or institutional setups are something else and obviously not included in the definition of externalities. Unintended

consequences also are used to refer to consequences experienced in addition to those intended by the actor who initiated the action. It would seem that externalities are a sub-set of the unintended consequences of sociology.

Cornes and Sandler (1986, 46) point out that "... an externality arises when the private economy lacks incentives to set up a potential market in some commodity and when the nonexistence of this market results in a Pareto-suboptimal allocation." They investigate this in particular for public goods, impure public goods and club goods.

For welfare goods of the club type or the positional type there are no markets by definition. Whether there also is a Pareto-suboptimal allocation of these goods or not, is, I suppose, an empirical question. It is not an obvious conclusion that it has to be so, but the tendency for development of such a situation may be strong. One then should be on the lookout for externalities.

If one distinguishes between externalities according to origin and destination among either producers or consumers, it would seem that various types of externalities correspond roughly to various approaches to "internalizing the externalities".

Table 3.2
Various ways of handling externalities

		GENERATOR OF EXTERNALITY	
		PRODUCER	CONSUMER
PRODUCER RECEIVE EXTERNALITY	PRODUCER	CONTRACTS SETTING UP MARKETS	"MARKET MANAGEMENT"
	CONSUMER	PRODUCTION REGULATIONS CONSUMER PROTECTION	*

Economists have mostly been concerned with externalities originating in the production or sales process and affecting either other producers or consumers. A much used example is how smoke from the generation of electricity may

affect a nearby laundry, or how the sale of poorly tested drugs may affect public health (Baumol and Oates 1988, Siegan 1979). They also have studied how the consumption process may entail important externalities for example in the congestion of road systems or telephone systems (Bramness and Christiansen 1976).

However, the general impression from the available literature is that the externalities originating in consumption processes are both less studied and less paid attention to in the political processes concerned with designing regulations (Siegan 1979).

The focus here is on the consumption of welfare goods and how different kinds of externalities may arise in the processes of consuming them.

Consumer generated externalities and welfare goods

1. Private welfare goods

Normally the utility which one person derives from the consumption of one unit of a private good will not be affected by whether another person consumes a unit or not. There may, however, in some circumstances be concern about the distribution of consumption with implications for utility. Since private welfare goods are either free or subsidized there will be a budget constraint on the number of units available at the subsidized price. The effective demand for the subsidized good may then exceed the available supply and the question of how to distribute the goods arises. If nothing is done, the first customer may buy the whole production and sell it at a higher price, pocketing the subsidy.

The usual solution is to ration the quantity one consumer can acquire. A bureaucracy is needed to determine how much each can get and to keep track of how much each has acquired. The cost of such a bureaucracy must then be compared to the increased income the consumers would have had without the bureaucracy and the subsidy. Maybe the increased tax going to the bureaucracy outweighs the value of the subsidy. But even if this may be the case, distributional consequences may be such that one prefers the bureaucracy and the subsidy. One could also consider increasing the supply of subsidized goods for an amount equal to the price of the bureaucracy.

The reason for making a private good a welfare good is of course the concern for the distribution of it. Consumer initiated externalities among consumers will in this case arise if no bureaucracy exists or if it does not work properly.

The social cost (or disutility) tied to consumption of the welfare good then depends on the cost of the bureaucracy compared with the distribution achieved. However, the consumption of private goods (non-welfare as well as welfare) also generates refuse. This private cost of consumption is easily turned into a collective bad if the private cost is minimized by throwing it out onto the street or over the fence to the neighbour. This problem has found its solution in the provision of various (more or less) compulsory club goods like sewers, garbage collection, and restrictions on the use of fire. Not everywhere are these club goods welfare goods.

2. Public welfare goods

For the pure public good there can be no consumer generated externality affecting other consumers. But for public welfare goods this is not true. A welfare good can be made a public welfare good by a political decision, like primary schooling or hospital services or roads. If a welfare good is available to all and in such quantities that there is no rivalry in the consumption of it, then it truly is a public good. However, modern welfare states have increasingly run into trouble fulfilling these requirements. There are barriers to the access to a hospital and there are times when traffic congestion mocks the idea of transport.

If one takes schooling as an example of a pure public welfare good, it is a question of to what extent it can be considered consumption in the same sense as for example hospital treatment. To the extent that education also or primarily is an investment in human capital, the amount and quality of the education each pupil receives will determine a ranking of those who have received the public welfare good. This ranking, based on perceived differentials in quantity and quality of the education received from different establishments, will lead to differentials in demand for the education of these establishments. If rivalry develops in the consumption of the education offered by some schools, it will be impossible to keep the school system a pure public good. If problems of maintaining a good as a public good appear, two different

ways of managing the consumption of it, without making the good a private good, seem to be available. One may either make it a club good or a positional good.

3. Positional welfare goods

If the welfare state has determined that what technically is a private good shall be available to all, like for example care in hospitals for all in need of such services, then the consumers are non-excludable from this service. If the number of persons judged to be in need of such services does not exceed the total available capacity, the good is a pure public good. But if there is just one person more than the capacity, rivalry develops and takes the form of waiting time for admission (crowding-effect) and/or schemes to bypass the queue (competition) as long as the quality of the service (time spent on each consumer) is kept constant. The typical positional welfare good is a personal service, like treatment in a hospital. For these goods there is not only a budget constraint, but equally important: there is a time constraint in the form of a finite number of hours of service available. The more hours of service each consumer consumes, the less will be available for other consumers.

Since it is not possible to distinguish between acquisition and appropriation, the consumers cannot "resell" any excess service they may get. The term acquisition is used for the process of gaining legal title to some good. Appropriation is used for the process of making the good a personal possession, a part of the owner's total portfolio of valued possessions. The distinction is useful since some "objects" are destroyed in the process of appropriation others are not.

Rationing of quantity like it was discussed for private goods, is thus unnecessary. It is the amount of time spent by the service workers which needs rationing. For most services competition for the time available will represent a pressure in the direction of a lower service quality as for example measured by the time and/or attention spent on each consumer. Professional standards and institutional barriers try to counteract the pressure towards lower quality. The rationing therefore typically takes the form of a queue of consumers. In this queue the consumption of one person affects the timing of the consumption of other, as yet unserved, consumers rather than the amount of service available per consumer.

The accumulated social cost at any moment depends both on the number of consumers waiting and the length of time they have waited and will vary according to how the disutility depends on waiting time. For some services like hospital treatment it may be considerable since people are known to die waiting for hospital treatment.

4. Club welfare goods

Club welfare goods are indivisible and excludable. Typically the club welfare good is tied to the use of a geographically bounded installation or a bounded resource. Like the wilderness quality of an area or the electromagnetic spectrum available for broadcasting. For the electromagnetic spectrum, however, technological developments seem to have overcome the problem of limited divisibility by increasing the sensitivity of both senders and receivers (Berge and Kranakis 2011).

In any bounded installation containing a good, there is an upper limit to the number of consumers which can appropriate the good at any one moment in time. The exact number does not have to be definite. As the number of consumers increase, each consumer will experience crowding. On the highway this has the consequence that average travelling speed goes down. In the telephone system the waiting time to get through, increases. Typical for this kind of externality is that the last consumer to actively try to appropriate the good not only increases the cost for those already appropriating it, but also his own cost. This is different from the positional good in that those joining the queue did not affect the cost of those already in the queue.

On the other end of the use scale, a club usually needs a certain minimum number of members. As the number of members decrease, thinning may lead both to a declining quality of the service (if for example sociability is an important part of the product) and to the closure of the club (if the fixed cost of the installation makes the membership fee or entrance fee too high relative to the good appropriated). In peripheral areas where the number of people go down, the decision of some households to move out of the area may lead to the closure of the local school, and hence to a welfare loss for the households remaining.

The consumer generated externalities of club welfare goods are experienced in real time and depend not only on the number of consumers but also on how close this number is to the carrying capacity of the club. Once the effect of crowding sets in, the total social cost will increase exponentially with the number of consumers Baumol and Oates (1988, 90).

It would seem that the effort to found a new urban sociology on the concept of collective consumption might find some justification in the existence of consumer generated unintended consequences associated with the consumption of the various club goods and bads found in "a relatively large, dense and permanent settlement of socially heterogeneous individuals.", as Wirth (1938, 8) defined the city. The "club" character of urban areas and the "club" character of many of the goods which make urban areas attractive to people, should be taken to qualify the assertion of Saunders (1986, 288) that "It is time, in short, to develop a non-spatial urban sociology which, while recognizing the empirical significance of spatial arrangements, does not seek to elevate these arrangements to the status of a distinct theoretical object." (see also Otnes (1986)).

On the problem of scale

Social systems work differently in small communities and in large cities. There is a scale measured in number of people. Likewise governing a large territory is different from governing a much smaller territory. There is a scale in number of square kilometres. One needs to be sensitive to the scale of units one studies (Gibson, Ostrom, and Ahn 1998). The problem of scale becomes more interesting when we combine size (area and population) with various management systems and the technology employed in delivering welfare goods and services. Let us consider establishing and running a hospital. It will supply services to a district where population size and travel time for each customer is a foundation. From experience one knows how many illnesses of various kinds, and how many may be hurt in accidents of various kinds. Despite variation in these numbers, the number of beds needed and the number of staff can be estimated.

The problem of scale appears as one realizes that some ills and some damages require specialized knowledge from the staff. And not only specialized knowledge: for some types of damages the staff needs members with

specialized skills that require regular practice. How large a population will be needed to supply a heart surgeon with one patient a week?

Supply of primary education is easier. But also here one encounters difficult choices. During the last decades the number of children per family has declined. As the number of children per teacher declines the cost stays the same. Funding the school becomes a problem. During the same time the requirement of the teaching has changed requiring better educated teachers. This usually means more teachers. Outside urban areas declining supply of pupils and increasing demand of the teachers has led to closure of small schools and long transport for pupils. At the core of this development lies the evolution of knowledge. Hundred years ago a district with one doctor (plus a nurse and a midwife) and one teacher (plus an assistant or two) would provide health and education for the local population. Today a team of doctors (plus many nurses), and a staff of teachers will be needed to do the same in the same district.

Similar processes are taking place in the core of the municipal administration, basically driven by national legislation. The result is an increasing and well educated staff. The number of problems transcending the single municipality seems to be growing. One solution is the amalgamation of municipalities to create sufficiently large administrative units. This encounters problems of community identity. Another solution is to create special districts dedicated to solving one problem. This encounters problems of democratic accountability.

At different scales one encounters different problems.

NOTE 4

Erling Berge:

Privatization and the nature of welfare goods

Introduction

For some time studies on "the crisis of the welfare state" has been a growth industry. An early contributor was O'Connor (1973), see also OECD (1981), and Mishra (1984).

The strategies involved in the various attempts of restructuring the welfare state has also been extensively studied (Ringen 1987). One strategy has been called privatization. Whether this is a strategy for restructuring or for dismantling the welfare state, is one of the issues discussed. It seems likely it may be used either way. The aim here is to see if it can be used constructively in reshaping the welfare state.

Before we can say anything about this, it will be necessary to investigate the different forms of privatization as well as the nature of the various welfare goods provided by the welfare state. To do this a general typology of goods will be used to classify welfare goods as either public, private, club or positional goods, and the character of different unintended consequences (external effects) arising from the consumption of the different kinds of goods to make two points:

- that the type of any welfare good is politically determined rather than technically, and
- that if one wants to change the supply of a pure public good to something more like a private good, there are two roads of privatization: by way of club good or by way of positional good.

While the external effects are determined by product specific characteristics and consumer preferences, the consumption process of the good is organized by political decisions. If a decision maker want to choose a road of privatization, the basic phenomenon he ought to take into consideration, would be the kind of unintended consequences that arise from the consumption of the

good. If the choice of how to go about the privatization does not consider the possible unintended consequences of the process it organizes, the negative effects may be aggravated or the positive effects inhibited.

Before we discuss this any further we have to present a background for the welfare state and a bit more on what privatization means.

The welfare state

A large number of studies have focused on the welfare state. By "the state" or "the government" it will in this essay be meant a system responsible actor (Berge 1986), both at the local level and at the state level, established by an electorate representing and acting in lieu of "the people". It has only been possible to consult a few which seem more relevant than others (Le Grand (1982), Le Grand and Robinson (1976), Le Grand and Robinson (1984), Klein and O'Higgins (1985), Ringen (1987)).

The welfare state is defined in relation to other states by the range of welfare goods it delivers and the criteria of eligibility. A state is a welfare state if it actively tailors the welfare goods it delivers and intervenes in the distribution of other goods (cash transfers and consumer protection legislation) in order to increase the equality and welfare among its citizens.

The rapid growth of the number and quality of the welfare goods as well as the active interventions in the distribution of other goods has since the late sixties run into increasing problems primarily in terms of finding tax revenues to pay for it, but also in terms of a more vocal opposition towards the various regulations laying down restrictions on the behaviour of citizens.

Many of the attacks on the welfare state are either directed towards the cost side: the public doesn't get their money's worth, or the supply side: the state is an inefficient producer of the desired goods. Often the two are connected and the conclusion, usually, is privatization.

Both the arguments phrased in terms of a desire for efficient production and those concerned about the benefit of the consumer leave out the distributional dimension. Yet, it is the distribution of welfare goods, the citizen cum consumer most easily react to. The "unworthy" recipients of social security, the "unjust" meting out of rights, the inexplicable denial of help; each incident

contributes to form an image of the welfare state shared by the public. If the same distributional consequences follow from a private sector process, they are not discussed in the same terms of equity and justice. It seems that from the welfare state rather few questionable decisions are needed to weigh up for all the right ones. It seems that a suspicion easily arises among many "taxpayers" that the "wrong" groups benefit more than they should. "The basic problem is that the political system cannot itself guarantee to produce the values required to assure loyalty to its policies." Taylor-Gooby (1985, 9).

One reaction toward this problem is privatization.

Privatization

Privatization, however, is not a well-defined concept. King (1989, 51) for example notes that "Opinion polls throughout 1989 consistently showed that most voters wanted more money spent on public services, not less; they also showed, in a remarkable reversal, that, faced with the privatization of basic industries like water and electricity, voters now want more state ownership of industry rather than any more privatization."

The statement would imply that privatization simply is the opposite of nationalization: privatization means less state ownership of industry. While this interpretation is both valid and important, taken as the everyday ideological use of the concept, it can only be used as backdrop to a more in depth discussion of the actual processes and strategies involved in the restructuring and reforming of the modern welfare state.

This is by no means the only possible point of departure for a discussion of the concept. Sennett (1977)'s study of "The fall of public man" might suggest it had something to do with urban culture and life-styles, and some of the papers in Gamarnikow et al. (1983) might suggest that it had something to do with gender politics. It may be that in the larger picture there are connections between the privatization-process in the welfare state and the cultural and political issues these authors discuss, but this possibility has to be investigated elsewhere.

One important distinction is between privatization seen as a cultural development with implications for the legitimation of the welfare state as it has

been implemented by particular states (Taylor-Gooby 1985) and privatization seen as the opposite of nationalization with implications for state activity in the way of provision, subsidization or regulation Le Grand and Robinson (1984, 3).

Often, however, the attention is focused rather narrowly on the state provision of goods. One then discusses privatization in terms of property rights in the means of production, the organization of production and the system of financing the goods (e.g. Kristensen (1984), Judge and Knapp (1985)).

Even so, the issue is far from simple. Whatever the focus of a discussion, public debates of privatization usually develops on several levels: politically, where privatized stands as a pole against socialized; economically, where market processes are seen as providing goods more efficiently than bureaucracies; and culturally, where privatized for some will be associated with the caring image and non-profit work of charitable organizations in comparison with the "non-caring" image of state bureaucracies, while it for others will be associated with the greedy takings of unscrupulous businessmen. Too often the rhetoric of the debate is simplified making it into an ideological debate harking back to earlier times and the left - right struggle over the status of private property.

While property rights - in terms of rights to control income generating assets - certainly is a central issue in the struggle to draw the line more or less narrowly around the activities of the state, a more careful study of the various situations where the concept of privatization has been introduced, reveals that the reality is rather complex (Kielland 1986).

Lorentzen (1987) identifies six varieties of privatization:

1. Privatization of responsibility (ideological/cultural shift in the view of what legitimately is a public concern),
2. Privatization of costs (moving in the direction of full consumer payment for a previously free or subsidized good),
3. Market privatization (undersupply of publicly provided goods opens opportunities for private supply of the same),
4. Contracting out (putting out to tender specific services or products wanted for public consumption),

5. Privatization of administration (transfer of administrative tasks from public to non-governmental organizations or private persons),
6. Privatization of services (private supply of new types of services similar to some of those supplied by the government).

If one confines the interest to the provision of goods, one can distinguish 3 tasks which have to be considered: 1) who pays for the product, 2) who organizes the production process, and 3) who owns the means of production. The classification is here taken from Kristensen (1984) who refers it back to Savas (1982).

For each of these one may simplify to one of two possible ways of locating the responsibility for performing the task: government or private. This gives 8 different combinations of responsibility, six of which are a mix of both government and private. Only two processes are "pure", one all private (the "market" solution), the other all government (public provision).

It is fairly easy to find examples of all six mixed types. Kielland (1986) in figure 3 provides the following examples:

Table 4.1

Examples of "mixed economies" in the provision of welfare goods

WHO PAYS FOR PRODUCTS	WHO ORGANIZES PRODUCTION	WHO OWNES MEANS OF PRODUCTION	EXAMPLE OF MIXED GOVERNMENT/PRIVATE ACTIVITY
GOVERNMENT	GOVERNMENT	PRIVATE	A public road built by a private construction company
GOVERNMENT	PRIVATE	GOVERNMENT	Physicians in private practice with patients in public hospitals
GOVERNMENT	PRIVATE	PRIVATE	Norwegian private schools
PRIVATE	GOVERNMENT	GOVERNMENT	A research officer payed by a private company working in a university department
PRIVATE	GOVERNMENT	PRIVATE	A public toll road built by a private construction company
PRIVATE	PRIVATE	GOVERNMENT	Physicians in private practice with patients in public hospitals payed by private health insurance

The question of why mixed processes for providing welfare goods proliferates rather than the more single-minded organization of activities in an all private or all government process, is one intriguing question which ought to be investigated more in dept. One reasonable explanation might be that this way one can utilize more consciously the desirable properties of market competition without sacrificing the overall objectives of equity and redistribution in the provision of welfare goods.

For the rest of the discussion we shall confine our interest to this most limited interpretation of the privatization issue: that agents other than the government organize, finance and/or produce services where this formerly was done by the government, or, alternatively, where some people think it ought to be done by it. In other words, privatization will loosely be taken to mean the opposite of nationalization.

The consumer needs

While the consumer is a central character in economics, it is a rather new preoccupation in sociology (Saunders (1986), Otnes (1988)). This picture is changing rapidly. The consumer perspective is emerging as a major approach in the study of the welfare society (Le Grand and Robinson (1976), Foster (1983), Page (1983), Herigstad (1986), Torp (1988))

Even if the consumer is a central character in economic theory, it is not an unproblematic one. Galbraith (1973, 29) notes: "In the neoclassical system consumption is a generally flawless thing to be maximized by any honest and socially benign means. It is also a curiously trouble-free enjoyment. Thought must be given to the selection of goods and services. No problem arises in their use. None of this is true, and what is omitted from view deeply shapes the patterns of individual, family and social life."

What he notes as the general case is of course doubly true for welfare goods. One who has tried to dig into this question is Tibor Scitovsky in his study of "The Joyless Economy. An inquiry into human satisfaction and consumer dissatisfaction." For welfare goods such as the road system and the hospitals, Scitovsky (1976, 108-112)'s distinction between products which relieve pain and products which give pleasure is useful. The demand for products which relieve pain, such as hospital services, is easily satiable.

"To start out with the simplest case, it is a well-established fact that consumers' demand for almost all narrowly defined biological necessities is satiable, in the sense of having a low income elasticity of demand and, presumably, an upper limit. From this one can always infer that the biological needs to which these necessities cater are also satiable. The desire to escape physical pain stops; and the pain stops when the biologically determined need is satisfied. Very similar to the comforts that relieve physical pain are those that relieve fatigue, eliminate bother, or save time." (Scitovsky 1976, 112).

The road system is supposed to satisfy the desire to get from point A to point B. The better the roads, the shorter the time used travelling will be. Roads are made mainly to save time on the trip from A to B.

As seen from a basic consumer's viewpoint, roads and hospitals are very similar in that they are not consumed to give joy to the consumer, but to satisfy a compelling need. On that account at least they are different from schools. Children do not usually see schools as a source of pleasure, neither are they designed to relieve pain. One may perhaps view schooling as an acquisition with the potential of giving pleasure.

If one distinguishes between welfare goods relieving pain and welfare goods giving pleasure, it would seem reasonable to expect consumers to react in different ways to interference with their consumption of them. The definition of luxuries and necessities in standard consumer economics (Deaton and Muellbauer 1980, 17-19) seems to resemble the distinction between goods giving pleasure and goods giving comfort. Luxuries are goods that take an increasing share of the budget as the income increases. Necessities are goods that take a decreasing share of the budget as the income increases. Inferior goods are goods that are consumed in decreasing quantities absolutely as incomes increase. Scitovsky (1976), however, finds that the distinction between luxuries and necessities, though formally defined straightforward by the income elasticities of demand, in reality are social constructs where one period's luxury becomes the next period's necessity. He finds it more interesting to concentrate on the consumer satisfaction.

Production, consumption, and exchange

The theoretical importance of the distinction between production and consumption has been extensively discussed. Saunders (1986) concludes that it is both important and necessary to study consumption in itself and not only as an integrated part of production.

The distinction between club goods and positional goods is also interesting because it coincides with one particular classification of the relation between production and consumption. This classification is based on the observation that sometimes production may be separated from consumption and sometimes not. The production of commodities is obviously separated from their consumption. Military protection, on the other hand, has to be consumed as it is produced. The classification is further based on differentiating between acquisition and appropriation as different aspects of consumption. Also for these two processes we can see that they sometimes are inseparable and sometimes not. The distinction between the club good and the public good depends on the existence of an exclusion mechanism. If defence is taken as an example of a pure public good there is no way of separating production, acquisition and appropriation. For the club good, on the other hand, the consumer has to make an active effort to appropriate the good. If the club exists and the consumer is a member, the good can, from the viewpoint of the consumer, be said to be both produced and acquired. Once you have a car, or a telephone, or a television set, you are a member of the club and have free access to the good. No one can exclude you. But still you have to do something actively to appropriate the good. You have to sit in the car and drive, or you have to turn on the telly and watch the program or you have to dial the number of another telephone owner and talk. The same distinction applies to the difference between private goods and positional goods. It is easy to see that the acquisition of groceries is not the same as appropriating them, and that it is impossible to acquire a personal service, like an operation in a hospital without appropriating it.

Table 4.2

Interrelations of processes involved in the production and consumption of welfare goods

/ PROCESSES ARE SEPARABLE
= PROCESSES ARE INSEPARABLE

TYPE OF GOOD:

PRIVATE: PRODUCTION/ACQUISITION/APPROPRIATION
(Excludable, divisible)

POSITIONAL: PRODUCTION/ACQUISITION=APPROPRIATION
(Non-excludable, divisible)

CLUB: PRODUCTION=ACQUISITION/APPROPRIATION
(Excludable, indivisible)

PUBLIC: PRODUCTION=ACQUISITION=APPROPRIATION
(Non-excludable, indivisible)

Divergent paths for the provision of welfare goods

With the concept introduced earlier it will be possible to describe some of the similarities as well as differences in what is happening to public welfare goods in Norwegian society today.

From the discussion above it follows that the consumer generated costs of different types of welfare goods can be ranked in severity from high to low like this:

Club goods > Positional goods > Private goods.

If one assumes that the consumption of all the various types of welfare goods lies approximately at the production capacity, it would be reasonable to expect that marginal increases in the demand for a club good will cause a far larger public attention than an equivalent marginal increase in the demand for a positional good which again will take precedence over

increased demand for private goods. This simply follows from the far larger increase in total social cost an increased demand for a club good generates.

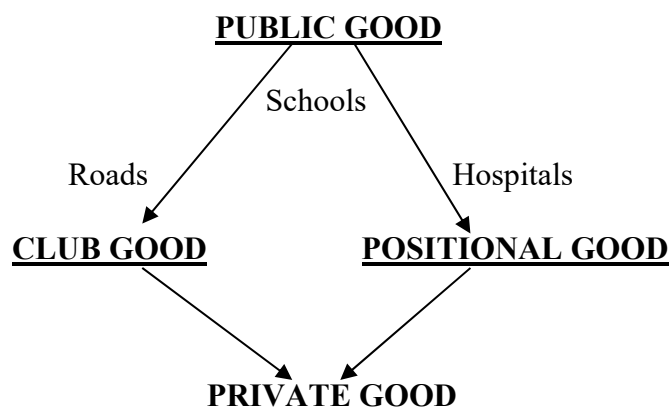
As long as the welfare goods are defined as pure public goods, documentation of increased demand should ideally lead to an expansion of the production. But since the various welfare goods are of different types with marked differences in social costs of overuse, a democratic system should be expected to react differentially to increased demand for different types of goods.

The attention devoted to traffic congestion and the fairly rapid interventions in form of expansion of the road system compared to the attention and resources devoted to ameliorating the hospital queues, certainly seems to follow such a pattern.

But what happens when no new resources are available for expanding the production of welfare services? Are there differences in the way we try to ration them?

In theory Norwegian primary schools, hospitals and roads are pure public welfare goods. Primary schools are in fact a pure public welfare good (so far). Hospital treatment seems to be emerging as a positional welfare good, while the road system is transforming into a club good (or rather several clubs).

Figure 4.1
Public goods, club goods, positional goods, private goods



It would seem likely that one of the reasons for the divergent paths is found in the magnitudes, distributions, and visibilities of the social costs associated with unintended consequences emerging as the number of consumers approach the carrying capacities of the production systems and thus initiates a breakdown of the public character of the good.

Dilemmas for the provision of welfare goods

1. Hospital services

Hospital services are basically designed to discover any source of pain and to relieve it (and to some extent to prevent pain from arising). Few people could be imagined to develop "a taste for hospital services". Once you become ill you desire the services very badly. But ordinarily you do not consider buying or consuming them. It would seem hard to convince a sound and hale person to buy a coronary bypass operation the same way one may imagine convincing an eskimo to buy a freezer. This alone will not prevent private enterprise from making a profit from those persons who, through unhealthy lives or intolerable stress, in due time come to need the bypass to stay alive. But one can imagine situations where competition for customers may lead to the development of interests among some suppliers of commercial health care to work against preventive health services.

Since it seems reasonable that hospital services are not desirable goods in themselves and that the demand for them is satiable, it would also seem reasonable to assume that no one would consume more than strictly necessary to become healthy again. If one also could assume that the need for hospital services arises due to random processes affecting only a small fraction of a population at the same time, I think it can be argued that provision of hospital services as public goods would be the most efficient system economically and also the most equitable system from a moral perspective.

However, people do not consume health services strictly on a need to become healthy again. Where a good is available free of charge for the consumer there usually appears what have been called "moral hazard"(Le Grand and Robinson 1984). For some people and for some events the ability to insure against an event leads to increased chance for the event to happen. To some people it will be tempting to consult the doctor on the flimsiest pretext if the

doctor's attention is a free good. And to some doctors it is tempting to prescribe both the most expensive testing and treatment as well as too frequent check-ups, if they know the patient does not have to pay. This is an argument against providing health services as pure public goods.

A problem identified with insurances has been called "adverse selection" (Le Grand and Robinson 1984). This problem arises if a) insurance companies have difficulties distinguishing between high-risk and low risk individuals, and b) high-risk individuals are more likely to insure themselves than the latter. This leads to a predominance of high-risk individuals in the insurance company and will increase the premium for all. This may in turn induce some more of the low-risk persons to leave the company, hence further increasing the premium. The high premiums will reduce the possibility for everyone to buy the insurances they need. Even if this will lower the demand for health services, on equity grounds it is more an argument against voluntary health insurance.

The process of adverse selection as well as the consumer initiated overuse of the doctors' time is congestion processes (thinning and crowding) with delayed effects. The time aspect of the problem suggests linkages to a positional diseconomy ("svartepersøkonomi").

For a host of reasons the demand for health services has proved difficult to satisfy. The reasons are among others found in medical science itself (rising standards for treatment and a considerable success in keeping people alive even if not able to restore their wellbeing), in organizational dynamics (growth impulses in a competitive world will, if the perspectives and inclinations of the hospital managers and the health professions are taken to their logical endpoint, make everyone either a patient or a care professional), in life styles (life style diseases, technologically created diseases, even the health system may create diseases as unintended consequences, Sieber (1981), Illich (1976)), and in the simple fact that in the long run, death is the one sure thing which even the medical profession fights in vain.

Whatever the reason, people want more of hospital services than the welfare state is able to provide.

The interesting question then is how to handle this situation. How do we best

preserve the good sides of the health service seen as a public good? If considerations of equity compel us to keep it as a welfare good, while developments elsewhere make it impossible to keep as a pure public good, the question becomes a choice of making it either a club good or a positional good.

The initial Norwegian response to the increasing demand has been to provide health goods as positional goods. People have to wait their turn in a queue. The only exceptions (at least in theory) are the life threatening emergencies. The introduction of entrance fees ("egenandeler") has been discussed, provoking strong dissent. For the chronic care units ("sykehjem"), per diem fees have been introduced. And an institution for private health care based on subscriptions has appeared (Ring Medical Centre). It has recently been promised approval as the first completely private hospital in the country. Previously there have been privately owned hospitals, but they have been organized and paid for by the public health system.

A system with entrance fees would in our terms take the system a step towards providing a private good. If the fee could secure admission immediately regardless of crowding conditions we would get a club. But this is unlikely to happen. As long as the fee is so low that everyone pays it without hesitation, the fee does not have any impact on the consumption of the good. If the fee gradually increases so that some of the potential customers of the system think twice before paying, the result is a private welfare good.

However, the hospitals are still much closer to being a pure public good than either a positional good or a private good.

2. The road system

The road system was initially (and in theory still is) a pure public good. No person can be excluded. Before the car became a means for mass transportation, there seldom were so many users of the road that crowding conditions entered into the quality of the good. Affluence and technological development has changed this. The car and the spatial division of labour created a demand for road-space in excess of the supply. The car made the road into a club good. Only those paying for the car (or motorcycle) had access to it. For others the road became too dangerous. But the increasing number of cars led

to crowding. On the road the result was more dangerous situations and accidents as well as rapidly increasing travelling time for all as each new user arrived.

If we consider the road system as a means of supplying a welfare good, we meet some of the same questions as for the hospital system, but also some others. Unlike hospital treatment, travelling may be fun and it does give joy to the tourist. But if we restrict ourselves to the daily travels, the commuting to work, travelling is a necessary chore the consumer will spend as little resources on as possible. In contrast to the consumption of hospital services, the necessary consumption of roads is a very repetitive act. It is not a random or very infrequent need. Like the need for hospital services, it affects a large and increasing fraction of the population, but still it is not a good the consumer willingly will try to maximize.

The fact that commuting in itself is a chore, and that the number of commuters and the resources used on commuting are rising, may sound like a paradox. But commuting, obviously, is the price paid to obtain other goods. This price the commuter will try to minimize. The public road system is then a subsidy of this price. But the number of cars on the roads during rush hours has led to declining quality of the product (or equivalently: decreased the value of the subsidy).

The main alternatives seem to be to build more roads or to, somehow, replace private cars by some kind of mass transit system. Experience seems to indicate that it is impossible to build enough roads, if roads are the only alternative. Mass transit with a quality competing with the road system has to be supplied. But the feasibility of this depends heavily on the pattern of land use: the number of potential customers. In a situation with too low population density to make mass transit competitive, it seems difficult to supply enough funds for the road system to keep it a pure public good.

The arguments for keeping the roads as a welfare good, if not a pure public good, may be different from, but as compelling as, those for keeping the hospitals a welfare good. But how can access to the good be rationed? How can the social cost of the individual appropriation of the good be taken into consideration?

The initial Norwegian response to congestion problems has been to build more roads and make the car more expensive. But funds have not been sufficient to build enough roads. New facilities like tunnels and bridges are now routinely (part-)financed by fees payable by all passing the toll-booths controlling the entrance to the new facility. Around Bergen and Oslo a "ring-wall" of toll-booths has been erected partly to finance extensions of the highway system, but also partly to finance better mass transit systems. This will, in addition to supply funds for extending the road system, also ameliorate congestion by increasing the private cost of contributing to it.

For the Oslo "ring-wall" the proposal was to charge for each trip by means of an electronic accounting system. This would make access to the streets of Oslo a private welfare good for those living outside Oslo as long as the incomes of the fees were below the "real cost" of the road system. The protests have been very strong. The opposition seems to be patterned according to how much each actually uses the road system. At first one will introduced a flat rate per month, half-year or year making access to Oslo a club good (a club within the club). The intention is still to go to the per trip charge (though with big quantity deductions on the per trip price).

3. Primary schools

Unlike hospitals and roads schools are not consumed to satisfy an immediate compelling need. It is consumed in order to enjoy a future benefit, or so most parents would argue in front of their children. As long as schooling can be maintained as a pure public welfare good, all is well.

However, because the benefits one can enjoy in the future, depends on the quality (or rather the socially perceived quality) of the education one gets today, parents are concerned about the quality of the education their children receive. This concern is expressed either as a lament over the uniformly declining quality of schools, or as informal gossip on which municipality provides the better schools or which school is better within the municipality.

If differences in fact develop among municipalities and these become large enough, people start voting with their feet, eroding the tax base the municipality uses to finance the schools (a thinning effect) leading to a further decline in

the quality of the schools in the municipality loosing inhabitants which in turn will lead to crowding effects and/or increased taxes in the municipality gaining pupils. This process is very similar to the one above called adverse selection. If the quality of an education is seen as depending only on the municipality (no rivalry of benefits once you are a citizen) education can be viewed as a club good with the municipality boundary as the boundary of the club. The social costs of congestion (crowding/thinning) work in this case through the tax system to affect everybody in the municipalities (clubs) in the same way as additional motorists affects the cost of travelling.

However, schools are more than the funds allocated to them. They depend on the quality of teachers as well as pupils. There may thus develop differentials between schools. The schools will then resemble hospitals in the way the product is provided. In this case education becomes a positional good. The social costs associated with excess demand for education from the better schools will appear as schemes for early entry into (or leapfrogging) queues of pupils waiting to enter. For primary education there are strict limits to the time parents are willing to let a child wait. But registering a child at birth and letting it wait until normal school start is not a very costly queue. Such queues might be useful to educators if they can use them as arguments for expanding their facilities.

However, in the "positional economy" (Hirsch [1976] 1978) education (with spatial location) plays a crucial role. Because the coveted positions education can qualify for are scarce, the bargaining strength one's own education has, also depends on how many others have the same or more education. Hence parents are not only concerned about the quality of their children's education in an absolute sense. Even more they care about the relative ranking attributed a particular education. Education from particular schools is a membership card to a club where entry into particular job-positions is the club good. If too many enter the club there will be congestion effects. Hence educators cannot expand their facilities without destroying the product they deliver.

From these considerations it follows that if differentials in perceived quality of education are attributed to schools or municipalities it may prove difficult to keep education a pure welfare good. It also follows that privatization and competition among schools will not lead to an overall improved quality of

education - at least if educators are to deliver what their consumers want.

If, on the other hand, the quality of schools is perceived as uniform and the status allocation of education attributed to individual differences in ability to absorb and utilize education (thus receiving larger amounts of education), there should be no particular difficulty in keeping the education a pure public welfare good. If funds do not allow one to keep it public, access may be determined by waiting time and/or individual competition, thus making it into a positional good

The nature of education as a welfare good is thus mixed. The dual nature of education reminds one of the dual natures of social structure: the dialectic between the bond and the boundary in establishing both the shared antagonism in the boundary between us and them and the shared valuations representing the bond between haves and have nots. The wish to keep it a welfare good is possible to reconcile only if one is able to keep the quality of the education uniform throughout the country. This perceived quality is of course based on the efficacy of the education in gaining access to some coveted type of job opening. If some alternative judged better than the rest should appear, pressure will start mounting for the expansion of the better school with less resources coming to the ordinary schools.

With the mounting demand for other welfare goods like health services or roads, the investment in primary schools seems to have lagged for a long time. Now the variation in quality among schools is becoming apparent. Parents are in increasing numbers taking their children to private schools like the "Steiner"-school despite the extra charge they have to pay. This both erodes the interest for and the ability to do something about ordinary schools. What future do schools have as a welfare good?

Private schools in Norway are to a large extent (85%) funded by the state. Even if privatized education will be a welfare good, it is no longer the "pure welfare good" which an "all-state" provision can be called. The privatization of the school system is towards one of the mixed types identified above (public funding, private organization and private ownership of the means of production). The per pupil fees are more to be considered membership fees. It would seem that the present growth of private schools is taking us in the

direction of providing education through a club system. The further development from a club system would then depend on which differences, if any, develops among the clubs. If none seems a better bargain than others from the point of view of the positional economy, the result may very well be increased consumer satisfaction from the ability to choose. For the primary schools this may not be too difficult to achieve.

NOTE 5

Erling Berge

On the regulation of professions⁷

Introduction

Professional associations have been an integrated part of the development of the welfare state as well a problem for its management (Broady (1985), Freidson (1987), Ramsøy and Kjølørød (1985)). At present there seems to be no widely accepted theory of how to regulate the activities of such actors, particularly not in relation to the delivery systems for welfare services.

Johnson (1972) presents an interesting perspective. His main thesis is that professionalism is one type of occupational control which takes its form from the type of producer-consumer relations dominating among the members of the occupation. He identifies three types of producer-consumer relations: 1) the producer defines the needs of the consumer and the way to cater for them, 2) the consumer defines his own needs and the manner in which they are to be met, and 3) a third party mediates in the relationship by defining central parts of the needs and the manner in which it is to be met. The institutional forms of professionalization corresponding to these types of producer-consumer relations may be called collegiate professionalism, Patronage professionalism, and Mediated professionalism.

A profession have been defined as a system where some particular, and publicly or professionally validated, education is necessary for entry into an occupation. The performance of the professional in the occupational position is regulated to ensure that the education is put to socially responsible uses (Parsons 1968). It has been suggested that a profession may be defined in relation to the degree of monopolization of utilization of certain resources (knowledge and practices) appropriate to certain social needs (see e.g. Jackson (1970, 7)). It has also been described as occupations with non-transferable skills which are considered to be "the property of a specific community" (Johnson 1972, 57).

Perkin (1981) takes a step further by considering the rise of professionalism

⁷ This was first presented at Conference of Sociology, Geiranger, May 1990 (Berge 1991b).

in the English society since 1880 as a kind of transformation of the concept of property. He thinks "we need to take a more operational view of the professions than is customary in either their history or their sociology, which usually takes them at their face value and lists the beneficial traits which define them and the useful functions which they perform for society in terms of expertise, theoretical knowledge, intellectual training, the testing of competence, exclusive practice, a code of conduct, altruistic service in the affairs of others, and so on" (p.7). The beneficial traits of the professions include "the resources which the profession bring to the market of society, together with some of the devices, such as "strategies of closure" by restriction of entry, certification, exclusion of charlatans, etc., by which they exploit those resources" (pp.7-8).

However, Perkin's concept of property seems to be at odds with what here is meant by a property rights system. To think that the rise of professions imply a transformation of the concept of property is to misunderstand the concept completely. If Perkin instead had said "broaden the concept ...", or "development of a new type of property", he would have been more to the point. Instead he seems to think that the professionals may have "both the material self-interest and the moral conviction to be the harbingers of the new functional society and the vivisectionists of capitalism" (p.23), as if the emergence of professional knowledge as property would be impossible within capitalism or could not exist alongside other types of property. But to see a profession as a particular kind of property rights system is not the same as thinking other kinds of property rights less real or of less importance.

In the present paper a property rights perspective will be applied to professions and professional associations to investigate if this may be a possible basis for identifying dilemmas of regulation which have to be faced. In particular the medical profession will be discussed.

Property rights in professional knowledge

If Hohfeld (1917)'s classification of property relations is applied to the medical profession and the relations between those being members of the profession and those not being members, we see that the customary description of the relationship (Gerhardt (1989), Levine and Kozloff (1978)) contains all the elements of the definition of a property relation.

Table 5.1

The property rights aspects of the relations in the doctor-patient role

Owners are in this table the "doctors"; the non-owners are all other persons. The non-owners desiring something of what the doctors "own" are the patients.		
	OWNERS	NON_OWNERS
Use aspects	RIGHTS all doctors can diagnose and prescribe treatment for patients	DUTIES all non-healthy persons shall go to a doctor
	PRIVILEGE a doctor can decide that a non-healthy person is healthy or that he needs the services of a second doctor	NO RIGHTS to expect any particular diagnosis
Exchange aspects	POWERS doctors can sell their services for a fee or give them away freely	LIABILITY enter sick role*, take treatment and pay cost (if any)
	IMMUNITIES their "powers" are protected by law against all non-owners trying to exercise them	NO POWERS Liable to prosecution for attempts to exercise the powers of an owner (quackery)
* One might perhaps say that what the non-owner buys from the doctor is a particular custom-built sick-role. To say that it is custom-built does not only mean that the doctor utilizes the symptoms of illness to be found, but also that there may be cultural factors affecting the role.		

Problems in the property rights of the medical profession

The institutional implantation of the property rights of the medical profession contains some severe problems.

One problem is the relationship between the medical profession and other occupational groups involved in the production of the end product.

A second problem lies in the internal dynamics of a profession in relation to the needs of its customers.

A third problem is the cost explosion following the divorce of needs from payment and the increasing capital requirement of treatment.

The end product of the medical profession, the delivery of which is the basis for their incomes, is a joint product with several occupational groups which have to be paid from the same incomes basis. In so far as there is a

roof on the total expenditure on the health system, the remuneration going to the various occupational groups is a zero-sum game. The norms of distributional justice which supported the work to establish public health insurance are also applicable to the distribution of wages among the health occupations. At present the medical profession seems to have problems justifying the existing inequalities. If they are not able to meet the challenge for fair distribution from their co-workers in the health system, their authority, and the trust on which so much of their achievements are built, may suffer, and their ability to persuade the political forces to accommodate their interests may diminish.

The public interest in this fight over remuneration is, however, more than just a worry over the bill. Such disputes within a system always absorb energies which then is lost to the patients. The union struggles of the health occupations entails costs (external diseconomies) for the public in terms of less health care for the money spent.

Also the second problem area mentioned the internal dynamic of a profession, leads to such conclusions. Weale (1985, 156) observes: "any professional ethos is bound to encourage the development of certain attitudes and practices which run contrary to the needs of consumers. Let me pick out three features of a professional ethos that can lead to this result: professionals will prefer the interesting to the mundane; they will prefer the prestigious to the ordinary; and they will prefer the fashionable to the unfashionable."

Actually, which patients are the "mundane, ordinary and unfashionable" is at least partly a result of the cultural and social processes distributing status both among doctors and among patients. An example might be the fate of patients with psychological problems before and after Freud. The tendencies to avoid the mundane, ordinary and unfashionable together with the unavoidable specialization of the medical services, as it has expanded, will inevitably lead to a distortion in the supply of products as measured against demand. The mundane, ordinary and unfashionable patients will receive less attention and ultimately less service than the interesting, prestigious, and fashionable.

One way in which this problem has been handled is to concede the right to

treat some of the most mundane, ordinary and unfashionable patients to other occupational groups. In so far as there is a roof on the expenditures for health services, not only will the various occupational groups have opposing interests, but also the various specialties of the medical profession. The fights among specialties for increasing the resources devoted to one's own specialty, will, as for fights among the occupational groups, take time and attention away from the patients, and ultimately mean less health services for money spent.

The primacy of the interesting, prestigious and fashionable also has consequences for costs seen from another perspective. Today the interesting, prestigious and fashionable is tied up with research and development of new medical technology as well as a strong demand for this technology from the practitioners. The divorce of needs from payment at the consumer level and the divorce of demand for equipment from the utilization and corporate efficiency of it, leads to a badly distorted investment program, less resources for the less "sophisticated" patients, a confused picture of treatment possibilities, and, ultimately, less health services for money spent.

The comparative lack of professional interest in the mundane, ordinary and unfashionable also have sparked reactions against the medical profession in the form of various health rights movements demanding better care for special groups like the mentally and physically retarded. The cost escalation of a professionally managed consumption rather than consumer managed consumption in a world of competing claims (from various types of medicine as well as various types of consumer interests) has about run its course. The ability of the state to pay is about exhausted. How will this affect the dialectic between doctor and patient? and how will it affect the health establishment?

The critical factor to watch is the trust in the medical profession. If people start to lose their trust in the services of the profession, the political commitment to pay will diminish. The spiral downward will have started. This diminishing of the power of the medical profession may be necessary before any kind of regulation curtailing their privileges and powers are possible. But if not the regulating agency is alert, it may easily get out of hand doing irreparable damage to the fine instrument for welfare a properly

regulated medical profession is.

Professions and professionalization

After reviewing the literature on professions Starr (1982) found that "A profession ... is an occupation that regulates itself through systematic, required training and collegial discipline; that has a base in technical, specialized knowledge; and that has a service rather than profit orientation, enshrined in its code of ethics." (Starr 1982, 15). It seems to be a common presumption in American literature that a profession regulates itself. While this is true of the U.S.A., it is not a universal state of affairs, as also recognized by Parsons (1968). Most European states regulate professions by public intervention through law or grants of charters to the professional association. This difference may be important when it comes to the question of regulating the activities of professions.

This seems a fair summary of current definitions of professions (Parsons (1968), Huntington (1957), Jackson (1970), Torgersen (1972), Merton, Rosenblatt, and Gieryn (1982), Abrahamsson (1985), Abbott (1988), Knutsen (1989)).

Freidson (1986, 36) finds "that there is no way of resolving the problem of defining profession that is not arbitrary". But he also notes that some perspectives on professions "are more consequential than others if only because they stem from positions of substantial political and economic power". These perspectives are "authoritative in the pragmatic sense of setting the legal, political, and economic limits within which everyday professional work can go on reasonably securely and of guiding the provision of the political and economic resources without which the circumstances and opportunities for work cannot exist" (p. 36, my emphasis).

In the property rights perspective property is seen as concrete existing, effective rights used in the everyday appropriation of reality. Freidson's approach would thus seem appropriate for the present purposes. But to begin to assess a profession as a system of property rights we need to look closer at a profession and the process of professionalization in terms of

1. what is special about the valuable resource which the profession "owns"?,
2. how can anyone become an owner, and
3. how can the owners go about maximizing the benefits from being "owners".

The "claim to expert knowledge and still more the procedures by which to put it into practice are the major resources from which the professional may hope to wring income" noted Perkin (1981, 8).

Knowledge and expertise is, once acquired, an inalienable and renewable resource. Actually, exercising the procedures of one's training is the best way of keeping them in repair. The gateway to this kind of resource is education and training. All persons taking the time and effort to acquire the education and training will have access to the resource. Having access to a resource, however, is not enough. Some product or service based on the expert knowledge has to be offered to those without access to the resource. Payment received for this can then be converted to the necessities and luxuries of life.

Having access to expert knowledge and training and being able to offer consumers some product based on this, is the necessary prerequisites for the establishment of a profession. To establish a profession the utilization of the expert knowledge and the payment for the services based on it must be regulated. Professionalization really means elaboration and specification of the property rights governing the utilization and remuneration of the expert knowledge.

Knowledge and training for some particular kind of occupation is in the concepts developed above, an indivisible and excludable good. It is indivisible since, however much any particular individual uses it, he or she does not diminish in any way the resource for any other individual with access to it. It is excludable since anyone wanting access to the resource, has to have education and training. It is possible to deny this education and training to any particular individual. In other words, the expert knowledge and training for a particular occupation is a club resource. The members of the club will be called an association.

To convert a club resource to an income generating asset, i.e. capitalistic property, there are at least five steps to be considered. They do not have to be taken in any particular sequence, but they are cumulative in the sense that the more steps an association has taken the more "professional" it will be. Often the question of the degree of professionalization of an occupation is asked (Broady 1985). In a property rights perspective this question can be given a rather precise answer.

The five steps are dependent on two preconditions Starr (1982, 79-81): 1) "enough people" have to be persuaded that there is some real benefit to be enjoyed from the services offered, and 2) a minimum of internal consensus among the members of the would-be professional association. How many will be "enough" and the means of persuasion will vary with times and circumstances.

Indeed, one might say that the most fundamental and intriguing question about the rise of for example the medical profession, is the complex process through which they built their authority both internally within the profession and vis a vis the rest of society: how more and more people gradually came to believe that their services were of real benefit, and how they were able to build and legitimize their authority as they introduced more and more of the steps necessary for transforming their chosen occupation to a property rights system. Starr (1982) begins to tell this story. But, also he notes, there has to be differences between U.S.A. and European countries in the process leading up to the present status. Comparative studies of the rise of the medical profession in different cultures might be instructive for understanding the different paths of professionalization and which elements of the process are more important. But if we for now take for granted that this process is possible, one may say that an association may be more or less professional according to how many of the following five steps it has been able to take:

1. A first step of professionalization might be to issue membership cards showing who can legitimately claim access to the common resource and what kind of product they are supposed to offer their customers (this depends on precondition

By definition the only qualified judge of the expert knowledge and training of a person is another person with the same expert knowledge. To guard against charlatans destroying the market for those who offer the "real thing" those having passed the education and training with adequate results are issued certificates, diplomas or some such public guaranty. They are members of the professional association and have now a monopoly on a particular configuration of knowledge and training. That is the real thing as agreed upon by the "experts" and believed by the "customers": "For the essence of a profession is the provision of an esoteric, evanescent, fiduciary service - salvation, litigation, medical advice, education, financial control, administration, or even engineering (when the final test involves loss of life) - which is beyond the immediate judgement of the non-professional, cannot easily be pinned down or faulted even when it fails to achieve the desired result, and must therefore be taken on trust" (Perkin 1981, 8).

2. A second step of professionalization could be to gain control of who and how many get access to the required education and training.

The number of entrants is important for two reasons. There are few products which can be supplied in unlimited quantity. If there are too many members of the professional club, there may be problems of income for the members of the club either because there is an upper limit to the demand or because there is not enough resources available to pay for what is on offer. The fear for a collapse of income from oversupply of qualified personnel is one reason for wanting to control the entry into the profession. The other reason is the possibility of extracting a scarcity rent from the market. If there is no substitute for the services of the profession, undersupply of the service can increase the incomes of the members of the profession. With control of numbers and monopoly of services members of the profession will be assured a high income which easily can be transformed into high status. But an attractive career also attracts applicants from high-status groups in society. This is important for the process of building trust in and legitimacy for the services offered.

The question of who enters the profession is important not only in terms of aptitudes and skills, but also in terms of social statuses and cultural beliefs. Perkin found that "it is important to note that it is not the knowledge itself or

even the service as such - which may be false or non-existent as in some kind of medicine or religion - that matters, but the belief in it on the part of the client or employer and society" (Perkin 1981, 8). High-status entrants facilitate the task of reinforcing the authority necessary for an unproblematic exercise of the profession.

3. A third step of professionalization would be to gain control of the market for the products offered by the members of the profession.

The control of the market has two components. The first is to manage the need for the products offered by the members of the profession. The second is to assure the ability of the consumers to pay for products. The basic requirement for doing something in this field is to have acceptance of the expert knowledge in defining the needs of the consumer. But the ability to do something depends heavily both on the nature of the product offered and on the cultural beliefs in the validity and significance of the products offered. The ideal situation is to have a product of high cultural value, with no easily defined upper limit for consumption, and with some other than the clients having to underwrite the bill.

The problem for the medical profession, so far, has been, that there existed a fairly well-founded belief in an upper limit to the consumption of medical services. New technology has, however, improved the ability to keep people alive to the point where it is the ability to pay which effectively sets the limit on consumption.

Particularly in relation to the welfare professions, the state has taken on the duty to pay all or part of the bill for services rendered. For these professions the task is to manage the needs and coordinate these with the supply of services.

4. A fourth step of professionalization is to gain control of the transformation of the resource to marketable product.

Problems about advertising, licensing of new technology, and problems of organizing the assistance of other occupations, emerged early for the medical profession.

When all "owners" possess "the same object", the advertising of the services flowing from this object become a matter of concern for all owners. Misrepresentation of the quality of the services would have repercussions on all other owners.

Likewise the development of new technology, like drugs, had to be controlled, much for the same reasons.

Of utmost importance was the control of new occupational groups. New services offered were developed as joint products with other occupational groups. It is important for two reasons. In relation to other occupations, the occupation granted control of the production process also is able to manage the flow of rewards to its advantage. But equally important is that it reinforces the authority of the profession. The cultural belief in the ultimate value of the insights of the members of the profession is mirrored in the social structure.

5. A fifth step of professionalization is to gain control of the recreation and augmentation of the resource base of the profession.

In a culture dedicated to the ideal of development and improvement, no one can be satisfied by status quo. In order to keep up with the changing society, the knowledge base of a profession has to be updated and improved. This means that research and development of techniques has to be done by members of the profession. If anyone else does it, the profession is in constant danger of being replaced by another group.

A property rights paradigm on professionalization

That an interest group wants to do all the things which above were suggested they can do is not surprising. It is a rather common observation that any group will rig the market if it can. What is interesting to ask is why any particular group have been allowed to do some or all of what they would like to do. Can the four perspectives on property rights, the transaction costs and externality perspective and the social power and distributional justice perspectives indicated above be of any help?

To gauge the utility of the various perspectives on property rights one has to apply them to concrete situations. In the literature the medical profession

seems to be judged as the most successful of all groups aspiring to professional status. They will be used as an example in the following discussion. Starr (1982)'s account of "The social transformation of American Medicine. The rise of a sovereign profession and the making of a vast industry." is a remarkable story of how the medical profession succeeded in the U.S.A.

1) Transaction costs and externalities.

Transaction costs in this connection means all costs involved in the development, policing and enforcement of a particular institutional arrangement, including all particular contracts involved in the total institutional arrangement. They become relevant only at the point where external (dis)economies of an existing institutional arrangement become large enough for a group powerful enough to change the institutional structure to take account of - to internalize - the external effects. The question then is whether the transaction costs of the new institutional arrangement are higher or lower than the present ones. If they are higher than before, but less than the gain from control of externalities, can those gaining from the change be persuaded to pay the increase in transaction costs?

For medicine to become established as a profession the old institutionalized arrangement taking care of the health problems of a population had to have accumulated the inducements (the diseconomies) to change it. Two developments are significant in this respect. Population increase and concentration into urban areas along with increases in volume and frequency in travelling set the stage for new and more dangerous epidemic diseases. At the same pace cultural changes connected with education and industrialization led to a decline in the authority of religion and the lay treatment of illness.

The diseconomies of slow and inadequate treatment of epidemic diseases were eloquently demonstrated by the large pandemics from the Black death and onwards. Control of epidemic diseases, however, were achieved before the rise of the medical profession. The import of the historical experience lies in the meaning and significance it gave to their claim to expertise in this field. When trust in the religious explanation of disease and suffering waned, and the medical men claimed expertise in the field, people were ready to believe

and grant them the rights, privileges, powers and immunities necessary for dealing with the grave danger represented by the epidemic diseases.

Once granted these rights, the medical men set about capitalizing it, i.e. transforming them into property rights. They closed the profession by requiring certification and outlawing anyone else wanting to give advice on health matters. Otherwise, of course, they could not guaranty the quality of their service. Since any particular customer, as well as whole communities, was unable to check on the quality of the services, no one could deny this as a sensible measure. The major tool for this was the medical schools. Certification and control of education and research at the medical schools followed.

The profession also started regulating the number of entrants to the medical schools to guard against oversupply of medical men. If the quality of the service were to be upheld, there should not be more doctors around than actually needed. The education was expensive and if there were too few patients the moral hazard of prescribing unnecessary treatments would be great for the doctor with too few patients to earn a decent living. The scarcity rent which the control of numbers paved the way for, was a happy unintended consequence - for the medical profession at least. The competitive admittance requirements and the good income possibilities assured a steady flow of talented youth into the profession, again a happy unintended consequence for the profession.

The certification of the medical expertise and the closure of the profession may be explained by the problems (diseconomies for the population) which one might imagine followed from not doing it. But the further steps of gaining complete control of the market in the form of separating ability to pay for services from services rendered and gaining control of the transformation of knowledge to final product cannot be understood in terms of external diseconomies alone.

2. Distributional justice and social power

In order to contain epidemics and assure everyone a minimum of health, the society should insure its citizens so that the doctor would get his pay whether the patient were able to pay or not. Without a cultural commitment to

distributional justice this would have been difficult to achieve. In all countries the trend has been in the direction of separating needs for services from ability to pay for services. But this separation of service and payment has generated some problems as yet unresolved. The moral hazard of doctors to prescribe unnecessary or too expensive treatment - which once was a reason for professionalization - has reappeared since payment is assured in any case, and the incentive for the public to take care of themselves and not run to the doctor for any kind of trifling problem is at least not economic.

The struggle of securing control of the transformation of knowledge to final product has been fought on several fronts and is still being waged. The first important fight was to gain control of the drug industry. This was achieved by regulation giving the medical profession the right to approve and prescribe drugs. A major reason for this was again the problems following from charlatans and deceptions in the drug industry. The potential consequences of unregulated drug-marketing were seen as too damaging for a trusting population.

The next and still unresolved fight was to keep control of all the "ancillary" occupations which have risen in the health system. So far the medical profession has been able to stay on top by the thrust of being first and utilizing their authority. This struggle is intimately linked to the rise of the hospital as the major arena of the health system and the administrative bureaucracy this requires. Membership in the medical profession does not qualify in any particular way for bureaucratic administration; still the members of the profession have been able to persuade the public that only they can do such a job. At least that holds for Norway. The situation in the U.S.A. is different (Starr 1982).

To keep the control of the hospitals is important because of the increasing importance of technology in expanding the needs for medical services, and it is important because of the role of hospitals in the research and development of this technology.

Conclusion

It seems that the current implementation of the property rights of the medical profession generates an increasing number of external diseconomies, as well as increasing transaction costs in the form of bargaining between and administration of various factions of the health professions. Questions about the distributional justice of the professional practice both vis a vis the other occupation and vis a vis the various types of illnesses in the population can be raised. When external diseconomies arise or injustices are done, because of the way property rights are defined, it is the duty of a state to intervene and regulate the property rights in such a way that the external dis-economies are reduced and justice is seen to be done.

In such an attempt the following points would be relevant:

One must recognize the fragmentation of the knowledge and skill base of the medical profession as well as the importance of the new occupational groups and their knowledge and skill base, and ask the question of how one can judge the relative merits of the contribution from any particular occupation to the overall product.

It may be a bit hard to envisage that the powerful medical profession will see the enlightened self-interest in sharing the various benefits flowing from their property. In this they need help of the state and its power to regulate. But, given the power of the medical profession, one can equally doubt the ability of a democratic state to go far in diminishing the privileges and immunities of the doctors. The best bet to do something in this line may be to get a professional bureaucracy for running the hospitals and make the doctors employees. In addition one has to define more clearly the boundaries of the intellectual and practical property of the various occupations. In other words: make all health occupations more like professions, but also emphasize the need for a state to regulate as well as guaranty the rights, privileges, powers and immunities of the various owners.

The cost problem of modern health systems can be traced to the divorce of payment from services rendered. However, the considerations leading to this divorce are still valid. The positive externalities from a prompt handling of illness are large and the value of equality in health care and opportunity for a healthy life so strong that it is unlikely a return to the old system of

payment will come easily. The question of finding an alternative way of controlling the balance between benefit of services and pay for services must be investigated. This work has been going on for some time in attempts to design "performance measurements" (National Consumer Council, Chartered Institute of Public Finance and Accountancy, and Public Finance Foundation 1987).

NOTE 6

Erling Berge

On the assessment of property rights systems

Introduction

A property rights system can, short and imprecise, be defined as an institution determining who shall get which benefits from which resources. According to Godelier ([1984] 1986) "the concept of property may be applied to any tangible or intangible reality", and rules of property rights will "always assume the form of normative rules, prescribing certain forms of conduct and proscribing others under pain of repression and sanctions" (p. 76). But he also warns that "Property only really exists when it is rendered effective in and through a process of concrete appropriation." (p. 81).

Property rights in the means of production are usually recognized as one of the major institutions of a society. In Marxian social science the relations of production (i.e. the distribution of property rights) is seen as one of the major institution of society defining among other things the class divisions of society (Elster 1985). However, property rights as such seem to have been taken as rather unproblematic. Above on page 29 we have included a quote from Giddens (1981, 113) where he takes note of Marx's missing analysis of property. On this point Giddens' critique of historical materialism might have profited from a more thorough understanding of the concept of property. Anthropological and historical research has demonstrated that property rights systems are not immutable structures. They change and transform in response to more pressures than the forces of production. Sometimes it may be appropriate to speak of a de facto development of property rights even though the particular rights as yet are unrecognized by the law as property rights. This might be the case for some developments in organized labour-capital relations, social security (compare e.g. Reich (1964)), or the rights, privileges, powers and immunities of the members of the more successful professions (see e.g. Perkin (1981)).

The aim of the perspective on property rights to be present here is to assess the utility of any particular property rights system in a comprehensive societal perspective. It is based on the property rights paradigm as developed

in economics. This is then extended by considerations based on distributional justice and power. It seems to the present writer likely that a property rights perspective on institutional change in the welfare state may furnish valuable guidelines for the choice of regulations and reform of institutions. Before we go on to present these perspectives on property rights, a few comments on the question of what a property right is, seems in order.

A property right is a relation

A right, as seen from the point of view of the right-holder, is an expectation about the behaviour of other actors affected by the exercise of the right. Coleman (1990b, 45-64)'s discussion of rights to act is very instructive for understanding a right.

A property right, then, is an expectation about the behaviour of all non-owners. It is different from other rights (non-property rights) in that the expectation is legitimate and relates to the appropriation of reality. It is accepted as legitimate by the non-owners as well as the owners. A right recognized as a property right have in developed democratic societies been given special status, protecting the holder of the right both from non-holders and from the state. If a legal system recognizes a right as a property right, special procedures are used and the holder of the right is given special remedies to help enforcing the right against contenders.

The process of how a right comes to be regarded as a property right is not well understood, but it would seem to be connected to a process of legitimation of authority in relation to the development of a conception of justice. In other words it is tied to the development of legitimate and just use of power.

The nature of property rights as these are recognized in legal systems have been spelled out in detail by Hohfeld (1913, 1917). A property right does not in itself so much concern the "something" giving benefit as it concerns the "who". A property right can be said to define a relation between an owner and all non-owners in regard of "something".

Relations among people are dual in nature since they can be experienced from two perspectives. By the nature of the problem, to regulate the streams

of benefits from human activities, a property relation has to be an asymmetrical relation. This was noted by Hohfeld who found that the property rights recognized by law had a dual asymmetrical nature. He classified the various legally recognized property relations to fall into four pairs:

Table 6.1
Aspects of a property relation

	IF OWNERS HAVE	NON-OWNERS
HAVE		
Use aspects	1. claim-rights 2. privileges	duties no rights
Exchange aspects	3. powers 4. immunities	liabilities no powers

Source: Hohfeld (1913, 1917)

The expectations of the owners about the behaviour of the non-owners, appears to the non-owners as duties towards the owner. The privileges of the owner concern which behaviour the owner is allowed without having to consider the reactions of the non-owners. Correspondingly the non-owners have no rights (i.e. expectations about the behaviour of the owner) which can interfere with the behaviour of the owner.

The powers of the owner are the abilities to voluntarily create new legal relations with a non-owner. These powers are curtailed in the law of contract and include of course everything from the short time renting of a consumer durable to outright sale of or giving away an entire estate. If an owner wants to exercise his power to create a new legal relation with a non-owner, the non-owners susceptibility to having his legal position altered is called liability (Munzer 1990, 18). On the other hand, an owner has immunities against attempts from non-owners to create new legal relations or interfere with established relations. The non-owners have no powers to create new legal relations.

To this must be added that the focus of the property relation in any case is some particular benefit from some source. The expected and allowed

behaviours concern this "something". The same does the possible new legal relations.

It is important to note that for a relation to be a property relation, it must be enforceable. The rights, privileges, powers and immunities of the owners are one way or another protected. Those violating them do so at a real risk of suffering sanctions.

Types of owners

For a particular stream of "benefits" from a "something", four types of ownership have been identified (adapted from Bromley (1989a, 205)):

1. Private or individual ownership

One particular individual is vested with the rights, privileges, powers and immunities pertaining to the possible "benefits" from a "something". These rights, privileges, powers and immunities of the owner have corresponding duties, no rights, liabilities and no powers for all others with regard to the "benefits" of this "something".

2. State ownership

One particular agency empowered to act on behalf of the state is vested with the same rights, privileges, powers and immunities as if it were a private owner. But being a "system responsible actor" a state will have to justify its property by particular rules applied in addition to the ordinary rules to justify and legitimize its property. One particular important modification involves rules of access: who can be excluded from enjoying at least some benefit from the state property. In concepts introduced earlier one might compare state property to impure private goods or positional goods.

3. Common ownership

One particular group of individuals are co-owners. The rights, privileges, powers and immunities pertaining to the benefits from that which is owned in common belong to the group collectively. Those not member of the group is excluded from the benefit, those who are members of the group cannot be excluded. Again one may compare this to the concept of an impure public good or a club good.

4. No ownership

Nobody is vested with the rights, privileges, powers and immunities of an owner. This means that any benefits of the "something" is open for appropriation for anyone willing and able to do so.

The distinction between no ownership and common ownership is important. The logic of the utilization of a "common property resource" (Gordon 1954) applies in reality to the resource with no ownership, the open access resource. For a true common property resource the logic will apply only under particularly specified circumstances. Needless to say, the open access resource is vanishing specie. Eggertsson (1990, 36) uses the label "communal property" for what here is called common property and "common property" for what here is called no property. It should be added that also Bromley (1989a), Bardhan (1989), and Eggertsson (1990) are contributors to this tradition. While Bromley and Eggertsson mainly present their own approach to institutional economics, Bardhan distinguishes three approaches to the role of institutions in economic development: 1) the Marxian approach, 2) the CDAWN approach (after Coase, Demsetz, Alchian, Williamson and North) focusing on the role of transaction costs, and 3) the imperfect information approach, referring to Akerlof (1970) and Stiglitz (1985).

Economic theory of property rights in institutional change

The works of particularly Coase (1937, 1960), Demsetz (1967), Alchian (1965), Alchian and Demsetz (1973), Williamson (1975, 1981), Posner (1972), and North (North and Thomas 1973, 1977) have been associated with the emergence of a property rights perspective on institutional development (Bromley (1989a, 12)), Bardhan (1989, 3-17), Eggertsson (1990, 33)).

Property rights concerns the practices, rules and beliefs which determine who will get which benefits from which resources. Property rights "help man form those expectations which he can reasonably hold in his dealings with others" (Demsetz 1967, 347). This means that property rights are a central part of human interaction. Even in situations where the actual on-going interactions have nothing to do with the distribution of benefits, one can see that the prevailing property rights affect the framework of interaction at least by defining and infusing the space-time setting of the interaction with particular meanings.

This view of property rights means that they are a central part of all social institutions and that institutional change means changes in property rights.

Eisenstadt (1968) defines social institutions as "regulative principles which organize most of the activities of individuals in a society into definitive organizational patterns from the point of view of some of the perennial, basic problems of any society or ordered social life" (p.410). Bromley, thinking of economic institutions, finds that they may be defined as the sum of "consensual arrangements or agreed upon patterns of behavior that comprise conventions", and the "rules and entitlements that define - with both clarity and obvious sanction - individual and group choice sets." (Bromley 1989a, 77-78). Bromley arrives at the institutional structure of society as the fundamental variable to study in order to understand the dynamic of the economic system. The study of social institutions seems to be the meeting ground of sociologists and economists (Swedberg 1987). But compared to e.g. Schotter (1981) and Williamson (1975), Bromley has come much closer to the sociological concerns with distributions and social justice as fundamental aspects of social institutions.

According to Lewis (1986, 58): "A regularity R in the behavior of a population P when they are agents in a recurrent situation S is a convention if and only if it is true that, and it is common knowledge in P that, in any instance of S among members of P: (1) everyone conforms to R; (2) everyone expects everyone else to conform to R; (3) everyone prefers to conform to R on condition that others do, since S is a coordination problem and uniform conformity to R is a coordination equilibrium in S."

In economics evaluations of institutional change has focused on property rights by two approaches:

- 1) The transaction cost perspective on property rights points out that property rights are not costless to define, agree upon, enact, and enforce, and
- 2) The externalities perspective on property rights points out that social change, e.g. technological change or changes in availability of resources, will initiate activities entailing changes in property rights.

1) The transaction cost perspective

Since property rights are about the distribution of benefits, the potential for conflict is great and the energy available for fighting over the distribution of the benefits is correspondingly large. The effort going into the definition and enforcing of any particular system of property rights can be seen as a cost to the society. The effort might have gone into producing and enjoying more benefits. In general it seems obvious that if fewer resources are spent on the definition and enforcement of property rights, more goods can be enjoyed by the members of the society.

One implication of this is that more effort will be spent on defining the property rights of those resources found most scarce and/or most valuable. Resources where there is enough for everyone will be open to everyone.

One should, however, temper this transaction cost perspective on the distributional struggle by noting that any institutionalized activity generates some benefits - even the losers of fights over distributions generate some benefits for themselves. In some cultures fights or feuds over resources can approach a way of life.

2) The externalities perspective

Social change implies among other things new behaviour. New ways of doing old tasks as well as new tasks emerge with new knowledge and changing needs and tasks. New behaviour also means changes in the nature and distribution of the unintended consequences flowing from the activities. These unintended consequences represent costs and benefits to actors not part (either directly or tacitly) of the activities. If the costs or benefits become large enough, questions of property rights to them arise. Demsetz maintains that "the emergence of new property rights takes place in response to desires of the interacting persons for adjustment to new benefit-cost possibilities." Demsetz (1967, 350).

This may well be true as a general tendency. But in any specific circumstance it may not be equally true for both the external benefits and the external costs. This follows from two additional points one has to include in the perspective: 3) The distributional justice perspective on property rights which asserts that the members of a society have preferences

concerning the shape of the distribution of goods and bads as well as for the goods and bads themselves, and 4) The social power perspective on property rights which reminds us that in so far we are looking for outcomes, interests in redefining property rights are always weighted by the power of the antagonists.

These two perspectives on property rights have not been systematically included by economists so far. To bring this into the debate we have to go to philosophy, sociology and political science.

Bromley (1989a) acknowledges the problem by noting that policy recommendations based on efficiency considerations are inseparable from distributional implications unless one assumes that current income is optimally distributed. He begins to assess the significance for the property rights perspective when he notes that new costs and/or benefits as the cause of changes in property rights "tells little if anything about the progression of property arrangements, nor does it address the obvious question of the suitability of the property institutions prior to change" (p. 217), and "In summary, property arrangements change in response to both market and extra-market pressures. The market pressures come by way of price changes, supply difficulties, and the expression of new tastes and preferences on the part of consumers. The extra-market pressures come by way of demands brought in the political arena in response to new tastes and preferences, new relative prices, and supply problems. The mix between market and extra-market will depend on costs and potential gains available from each route."(p. 219).

Bardhan (1989, 11) concurs. After comparing the neo-classical approach to institutional change to the Marxian, he concludes that "the question of efficiency-improving institutional change cannot really be separated from that of redistributive institutional change, particularly when issues of collective action, class capacity, mobilization, and struggle in the historical process are important".

Also the work of Sen (1984) on the entitlement approach to development is notable here. "Entitlements refer to the bundle of commodities over any of which a person can establish command, by using the rules of acquirement that govern his circumstances."(p. 30). Obviously, entitlements are the

individual side of a particular property rights system. The "entitlement approach" then is an emphasis of the distributional aspects of a property rights system.

3) The distributional justice perspective

The distributional justice perspective on property rights reminds us that value judgements are intrinsically a part of the process of institutional change (Bromley 1989a). People do care about the distributions of goods and bads and they elaborate justifications for the way things are or for the way things ought to become. The cultural process of legitimizing a particular system of property rights will for example affect the "transaction costs", the costs of agreeing upon and enforcing the property rights, through the enactment of laws, the degree of lawfulness among citizens, and the organization of a policing force and a court system. In so far as cultural norms and values underpin a property rights system, the cost of enforcing laws will be less than in a system with a high level of disputes about the property rights.

In the cultural process elaborating justifications for the distribution of property rights concerns about fairness and desert is as prominent as concerns about utility and effectiveness.

On the role of justice see Rawls (1971); for comments on "redistribution and property rights" see Nozick (1974, 167-174); for a discussion of distributional conflicts in relation to sustainable resource utilization see Schnaiberg, Watts, and Zimmermann (1986).

4) The social power perspective

In any particular circumstance where costs and benefits and their distribution are considered, it matters who bears the costs and who reaps the benefits. The social power of the different interested groups affects the way property rights will be redefined if they change at all.

Five types of power will be relevant to consider:

- I. Power based on the control of resources: 1) Physical power, 2) Economic power, 3) Ideological power, and 4) Knowledge power, and
- II. Power based on the control of processes: 5) State power, (Berge 1989, 41).

State power as different from control of resources and emanating from processes, can be defined in relation to the development and enforcement of rules governing social process so that 1) economies of scale are maximized, 2) diseconomies of scale are minimized, and 3) the unintended consequences flowing from processes and interactions of various processes give rise to benefits rather than costs (Berge 1989, 39-45). Wielding of power in such manner requires an ideal state.

In our societies the various kinds of power are organized and brought into two arenas: the markets, where streams of benefits are exchanged, and the political field where control of the state and some of the rules governing the market exchanges are determined.

In the more practical approach in designing the ideal state we will soon enough meet the question of who controls those who control the state. To this writer the best answer provided by history seems be the liberal democracies that arose in the 19th century. But they are probably not immune to decay. They will have to be reinvented.

NOTE 7

Erling Berge

Property rights theory and sustainable resource utilization⁸

Introduction

A broad interpretation of what sustainable development means, may take it to refer to the total societal resource base and its organization and utilization. The utilization of both renewable and depletable resources has to be accounted for in a perspective where the goal is long-term sustainable provision of freedom and welfare for the members of a society. The World Commission on Environment and Development thus defines it as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987).

A narrow interpretation of the term is to look only at the utilization of renewable resources. A resource may be renewable either because of growth (regeneration of plant and animal populations) or because of self-cleaning processes (dissipation of waste, both toxic and nontoxic). Sustainable development then refers to a mode of utilization of resources adapted to their potential for renewal. The two interpretations of resource utilization for sustainable development are, however, not independent. The broader, being the more difficult task, presupposes that the problems set by the more narrow interpretation are solved. The problems of organizing resource utilization for a sustainable development will therefore be approached by looking into the problems of managing renewable resources.

In a discussion of the problems involved in the degradation of what have come to be called "common property resources", Blaikie and Brookfield (1987, 188-196) note that the "tragedy of the commons" is not an inevitable law, but that it is set in motion "because of the breakdown of particular institutions of land management" (Blaikie and Brookfield 1987, 196), see also Berkes (1989, 70-88). They also note that often the state is involved in this breakdown by trying to enforce new rules for utilizing the common property resource without consideration of the old rules. The interaction of

⁸ This note is based on several papers concerned with sustainable resource utilization (Berge 1990a, b, 1991c, 1992).

old and new rules produce unintended consequences leading to an unsustainable utilization of the common property. This problem is discussed by McCay and Jentoft (1998) in relation to fisheries management. If intervention from the state is based on faulty assumptions about how the local community is working, one may create the local actors that ensures the tragedy of the commons. The problem is at the outset not a "market failure" (lack of well-defined property rights), it is a failure of the community (lack of a spirit of cooperation, lack of trust).

Hardin (1968) coined the phrase "the tragedy of the commons" to describe a kind of logical necessity in a process of competitive appropriation of an open access resource. See more on this below. Since then the study of "common property resources" has become a large field in itself (see e.g. Berkes (1989)). The somewhat unfortunate side-effect of the phrase is to associate the problems which are identified by the model with what in real life is called common property. The logical problems identified are in reality valid only for the open access resource: the resource where no ownership is defined (see Taylor (1987, 26-28), Bromley (1989b)). In the real world, the problems of e.g. the management of the fisheries, described as problems of managing common property resources, can be seen to be problems of managing resources with no ownership. Historically and legally, common property is a well-defined type of property right. Historically the commons of "mature legal systems" (the expression, here in a somewhat different context, comes from Honoré (1961, 107)) seem to have been no more prone to mismanagement than individually owned resources. However, it is true, that if a badly designed common property rights system is introduced for the management of a resource, the problems for a sustainable development will resemble the problems of an open access resource rather than the problems of privately owned resources. The unspoken, perhaps unintended, and clearly false conclusion of at least some of the "tragedy of the commons" literature is that there are no problems for sustainable resource development connected with private property rights.

What Blaikie and Brookfield (1987) say is in reality that the rules governing the resource utilization: the practices prescribed by a culture and the laws enacted by a state, determine whether the resource utilization is sustainable or not. This raises two important issues. The first is the precise connection

between rules of utilization and degree of sustainability. The second is the precise role the state ought to have in regard of the rules defining the resource utilization as well as how it ought to perform this role.

The role of the state in development is far from clear. A growing scepticism to the current practices has been voiced e.g. by the executive director of the United Nations Centre for Human Settlements at The international meeting on "Cities, the mainspring of development in developing countries.": "Clearly changes in policy direction are called for, and some of them may involve radical departures from existing practice. Such a change in direction must have as its point of departure that the solution does not lie in the direction of greater public spending or more direct government involvement. Rather government should concentrate on supportive and facilitating actions."⁹

Despite the differences of the liberal and Marxist interpretation of the role of the state in development (compare for example Nozick (1974) to Miliband (1969)), they both agree on its decisive importance. The state seems to have a both omnipresent and self-evident position in development. It is supposed to allocate economic resources, marshal military protection, supply manpower training, and foster national pride to achieve the concerted effort needed to improve the life of its citizens. However, the proper conceptualization of the state will not be an issue here, neither will development theory as such be discussed. Even so, one conclusion of the present paper seems to be that the state will do well to consider how the various societal processes work: that the means of development may be just as important, sometimes more important, as the goal. This is, however, intended in a more specific and precise manner than the common presumption of democracy, western style, as the best road to development. Apter (1987), in a critique of traditional development theory, argues that development, in the end, must entail democracy. But he also shows how problematic democracy can be in the process of development.

⁹ To the best of my knowledge there should here be the following reference:

"Ramachandran, Arcot. 1989. "Address by the executive director of the United Nations Centre for Human Settlements (Habitat) to the international meeting on "Cities, the mainspring of development in developing nations?", Cities, the mainspring of development in developing nations, 1989. In 1990 I clearly had access to the address by Arcot Ramachandran. But at this moment, in November 2023, I am unable to find it anywhere on the web.

In particular this paper will argue that one important means of development is regulation and control of the various processes of the society aimed at decreasing transaction costs, maximizing external economies, and minimizing external diseconomies. Consciously shaping the societal processes according to such principles is a task only a state can do.

It might also be possible to interpret historical development as an "unconscious" shaping of the states according to these principles. The shaping is then the result of competitive processes of systems of states (like the European in the time since the Roman Empire). In this system of states, the competitive edge will go to those states which more or less accidentally change in directions suggested here. Thus a system of states can, through small unplanned innovations in one or a few states and adaptations and imitations of the more successful ones among the rest of the states, move rapidly (relative to monolithic empires) towards prosperity and freedom for the many rather than the few.

It seems to be a reasonable guess that a state pursuing such goals as at decreasing transaction costs, maximizing external economies, and minimizing external diseconomies will increase the societal surplus so that not only are both citizen and state be better off with such regulations and controls than without them, but the citizen will also be better off with this kind of activity than with the ordinary direct allocative and organizing activities often pursued by states to further development. And when the citizen is better off, he is able to pay more taxes. In short: process control generates state power. One should also consider the "caging effect" discussed by Mann (1986). The development of state and civilization had a "caging effect". Even in the early empires most people found it did not pay to vote with their feet and leave the jurisdiction of the state despite repressive practices and heavy taxes.

A guide to such conscious maximization of state power can be found in what have been called a property rights perspective on institutional development (Bromley 1989a). Much of the transactions of a society can be viewed as involving negotiations about, explications of, transfers of, and enforcements of property rights. The rules for such activities as well as the restrictions on

how property rights can be defined and distributed are a significant part of the motivations and actions of every citizen and shape the aggregate outcome of their actions more powerfully than any kind of direct regulation of their activities.

In the present paper a property rights perspective on institutional development will be used to discuss some of the problems involved in the management of land use and to comment on the role of equity and distributional justice in sustainable resource utilization.

Property rights and resource utilization: A stylized example

As a baseline for the discussion we shall present a stylized illustration of how variations in property rights institutions may affect resource utilization. The example is stylized because it assumes that population pressure and history (or cultural practices) do not affect the decisions on land use. It is also assumed that no outside forces are interested in the outcomes of the decisions of the participating actors except to stop war and homicide.

The tragedy of the commons

Suppose a clearly delimited tract of land is owned in common by two tribes of traditional pastoralists. There is no one who can force either of them to limit their number of cattle. From old on, feuds and diseases have kept the number of cattle (as well as people) about constant. For the sake of argument, say that for both of the tribes the herds have been fluctuating about 5000.

But times are changing. A distant state administration (perhaps colonial) has prohibited the old feuds. Development aid has eradicated diseases among both people and cattle. Now the traditional competition about which is to become the more powerful tribe can unfold. But note that instead of competition for wealth and power symbolized by a large herd, a historically more credible cause of the same development may be attributed to population growth. Then, however, the process will take more than one generation to be completed. The tribes start to add cattle to their herds. The development expert looks on the process in despair and tells the tribes they have to reduce the number of cattle, otherwise the cattle will starve and they will both be poorer. Now, the chief is not stupid. He can see the merit of reducing the number of cattle. He understands that by adding an animal to his herd he can

reap the whole benefit of that animal while the cost in terms of diminished grazing is shared by the other tribe. But he also sees that if he reduces his herd, the competitor can get away with a larger herd and his fellow tribesmen can accurately accuse him of having given away the grazing rightfully theirs. And even worse, if he reduces his herd and the competitor does not, he effectively concedes victory to the other. True, he will have more cattle than if he continues to contribute to the overexploitation. But the other chief will have many times more. What shall he do? Turn "chicken" and concede victory to avoid the catastrophe threatening both or go on adding cattle to his own herd hoping the other will turn "chicken"?

Most people in such situations will choose to go on adding cattle to their herds, either hoping the forecasts of ecological catastrophe are exaggerated or hoping it will take a long time. However, sooner or later the tragedy will be manifest. Cattle starve. Men starve. In the absence of restraints (war, disease, cultural practices), "freedom in a commons brings ruin to all" (Hardin 1968, 1244).

Table 7.1
The tragedy of the commons.

Payoff matrix in a game of "chicken"			
		Cattle tribe B	
		More cattle	Same number of cattle
Cattle tribe A	More cattle	2	4
	Same number of cattle	7	5

The sensible thing to do is, of course, to do something else entirely. The two tribes should come together to negotiate an administration of the tract of land which can determine how many cattle each tribe can have and with power enough to enforce the agreement. The common property management systems found in various cultures do exactly this. They manage the common land with a view to keeping up its productivity. But the management institutions are never the result of negotiations. They have evolved as part of a culture. The sustainable solution may, however, be

based on both war and illness. The end of war and the introduction of modern medicine may therefore easily result in a population pressure which alone renders the traditional utilization unsustainable.

The rapid social changes in the current world and the large negative consequences of unsustainable utilization of resources, means that one can no longer trust the development of sustainable institutions to the historical process. Neither are most people willing to accept the starvation and suffering of people subject to the traditional historical processes regulating resource utilization. Instead of the slow trial and error process of history, we have to think through the problem to consciously design those institutions which now will give a sustainable utilization of the resources.

The first problem to face in this endeavour is to understand the forces shaping the traditional management institutions. A first step is to note that negotiations, administration and enforcement of contracts are not costless activities regardless of how a contract was established in the first place.

Transaction costs

Costs connected with the negotiating of an agreement and the policing of its execution are called transaction costs. In particular the monitoring and policing costs may be high in long-term agreements on resource management. It is a point to try to minimize these.

For the pastoralists the point of a new institution must be to induce them to stop adding cattle to their herds. This can be done by direct regulation of the number. This, however, requires comparable control data: counts of the herds at regular intervals. If, for example, the herds mingle, they have to be separated first. The cost of securing data for direct regulation may be considerable.

But there is also an indirect approach to the problem of regulation based on the causal mechanism making regulation necessary in the first place. One basic reason for continued growth of the herds in the situation described is that he who adds to his herd can reap the benefit of the added cattle while he does not have to pay the full price in terms of the resources used. The price is shared by the other tribe. The unregulated

increment in use of the land entails costs also for those not consenting to the use decision. This is the gist of what is meant by externalities.

External (dis)economies

An often cited definition of externalities says that: "An externality is present whenever some individual's (say A's) utility or production relationships include real (that is, nonmonetary) variables, whose values are chosen by others (persons, corporations, governments) without particular attention to the effects on A's welfare." (Baumol and Oates 1988, 17).

The chief who decides to add cattle to his herd affects negatively the grazing possibilities of the other tribe as well as his own. The action represents an external diseconomy for the other tribe. If one compares externalities and transaction costs they may from one perspective seem equivalent. The total social cost of those suffering polluting activities may be both less and more than the total social cost of enforcing a ban on this particular activity. From a purely economic efficiency point of view one might perhaps conclude that if the total social cost of those suffering the activity is less than the cost of removing the activity, then the activity should be allowed to go on. This conclusion is wrong even if one disregards the problems of measurement. The big difference between negative externalities and transaction costs is the possibility of distributing the transaction costs equitably

An alternative to direct regulation of the number of cattle is to concentrate on "internalizing" the externality. If there is any way of securing that the cost of adding cattle to the herd will affect only the tribe which adds the cattle, one might hope that they, in enlightened self-interest, would choose to limit the number of cattle. Then one would save the costs of the bureaucracy involved in direct regulation.

For the case discussed above, introduction of boundaries would be one such solution. If both land and water and any other valuable resource in the area can be equitably divided by a boundary, a fence maintained by the two tribes would seem to provide the solution with the lowest transaction costs to the problem of giving incentives for an ecologically sustainable resource management.

Complications: the free rider and the game of holdout

Two tribes in a clearly delimited area is of course the simplest possible situation one can imagine. In any real life situations there will be more actors involved and the area will not be very precisely delimited.

If an area is truly common property (as commonly understood) for those who use it, any kind of institutional change will require unanimous support of the involved actors. In this situation one often will find some actor more or less openly playing the game of holdout. The more profitable the institutional change is seen to be, the more likely it is that someone will find it to their advantage to play difficult to secure an advantage for themselves. The one holding out on the agreement to execute the change will, by being difficult, often be able to secure for himself a larger than fair share of the profit of the change, or, at least, by postponing the venture, put it in jeopardy of not being executed.

If one of the advantages granted to the holdout is to be exempted partly or wholly from the costs involved in the institutional change, the holdout is also a free rider. Free-riding can, however, also occur in situations without institutional change. If some actor is able to avoid paying or contributing to the activities necessary to keep up an institutional structure, the actor is called a free rider and the contributions of all others wanting to maintain the institution must be increased.

Taxes and the prisoner's dilemma

Consider, for example, a village which has been keeping the grazing land as common property, with direct regulation of the number of cattle for each member of the society and a police force to monitor the compliance of the regulation. For various reasons many of the villagers have fallen on hard times and the village council votes to exempt them from paying their taxes. The taxes for the rest increase, of course. However, it is hard to do much about poverty by exempting the poor from taxes. Somehow times do not improve. The image of reality in the council deciding on the issue is now that tax exemptions are necessary also for the entrepreneurs to further the industrial development of the village. Even more people are exempted from taxes and the few who still pay, begin to calculate what they gain by cooperating. At some point in this process those who pay taxes are faced

with the prisoner's dilemma: shall I continue to pay taxes or shall I defect to reap as many benefits as possible while the system lasts.

Those who cooperate by paying the transaction costs of the institutional regulations may soon find that the cost of providing for the free riders exceed the gain of the regulations. If they turn egoists they may still take out some profit before the system collapses and leaves everyone poorer. They may even find that they now have less left than they will have if everyone turns egoists. The tragedy of the commons returns. And with a vengeance, the prisoner's dilemma leaves considerably less possibility for a happy ending than the game of chicken. One should perhaps call this result the tragedy of a faulty state. Not quite as catching a phrase as the tragedy of the commons, but it points to the important problem of distributional justice. From the description of the management of the common property of the village there is but a short step to consider the modern democratic welfare state with its interest group politics. In some instances it might be illuminating to describe the state and its tax base as an open access resource. The implications are obvious. The tragedy lies in the fact that they all will have only a fraction of what they would if all were cooperating to pay the transaction costs.

Table 7.2

The tragedy of the commons

		Type B individual	
		Egoists	Cooperators
Type individual	A	Egoists	Cooperators
	Egoists	2	1
Cooperators	7	3	
		1	3

Discussion

The preceding brief and stylized example suggests two important conclusions:

- The introduction of properly defined property rights relative to a suitable social environment can encourage ecologically sustainable resource management.
- It is necessary to consider carefully the distribution of the costs of maintaining the institutional system defining and maintaining the property rights.

In relation to the first point it must be of particular interest to investigate the circumstances which render private property rights a suitable instrument for securing sustainable resource utilization. There is no reason to believe that ecologically sustainable resource management follows automatically from the introduction of private property rights.

Several types of social environments might be imagined suitable for private property rights to encourage sustainable resource utilization. However, a priori, it would seem reasonable that they all should show the following characteristics: 1) the owners of resources are secure in their possession, and 2) the interests of the owners of resources are long-term.

For the owners to take a long-term interest in the management of their property, a first requirement is security of the property. Security of property is always a question of belief in a guarantee given by a state (or its equivalent). The trust in this guarantee is liable to how the state performs its tasks. In particular it would seem a good test to watch the security of property vis-à-vis the state in situations of conflicting interests. But security of property is not enough to secure sustainable utilization. The temptation of short term gains will always be around.

One way to induce a long-term view of the utilization might be to convince people that if they exploit the resources for a maximum short term gain, they have to suffer some kind of negative consequence. A necessary requirement of the state would seem to include either non-interference if some owner comes to suffer negative consequences of bad resource management or directly administer a measured quantity of negative consequences itself.

Historically non-interference seems to have been the norm. A policy of non-interference would seem more feasible if the land (and in general the property) is divided among many rather than among few owners. With many holders of property the consequences of bad management will on average be less per decision maker and the learning potential, in terms of what is good management, larger. Usually the penalty of not taking the long-term view has been starvation and/or loss of property. Starvation does not seem to be a suitable penalty in contemporary society. What is a suitable penalty is a difficult question. But if private property rights, as historically developed, shall encourage sustainable resource utilization, the promise of short term (and sometimes large) gains has to be balanced by a suitable threat.

If society is unwilling to contemplate consequences like starvation and poverty, if the state on humanitarian grounds finds that it must bail out those coming to suffer the consequences of unsustainable resource management, or if the property rights system allows the owners to transform the extracted resources into profits, regardless of whether they are extracted sustainably or not, and invest them in other profitable activities, then the ecological argument for the private property rights disappear and direct intervention must be preferred even if the transaction costs then are considerably higher.

The analytical ideal type of private property without government regulation except guaranties for boundaries and security for transfers of property rights can be contrasted with the ideal type of state property with direct regulation of all resource utilization. Societies with ideal typical private property or ideal typical state property are not known to exist historically. By state it is here meant the system responsible actor all rational resource utilizers would choose to establish. For short periods of time some societies have approached a situation which may be analysed by the ideal typical concepts. Usually the property rights system of a society will be a mixture of the two ideal types.

But of course, in a modern welfare state the alternative to private property rights is not state property. The debate concerns the proper division of rights into rights the state has to own and rights which private actors have to own. Very much of ideological and political activities are directed at the demarcation and adjustment of the boundary between private and state interests. The result of the struggle are manifested in laws and regulations

diminishing the rights and privileges of private actors or securing and strengthening legitimate and established rights and privileges. At the same time technological and organizational development create new resources, new ways to utilize old resources or new problems for the old utilization of resources. Considerations on which resource utilization to guarantee, to tolerate, or to stop, is a process never finished. The system of property rights of a society has to be redefined and confirmed in a continuous process.

The distribution of rights between the state and private actors is not independent of the organization of the state. A democracy will for example need a very sophisticated government if it wants to pursue a consequent long-term strategy for resource utilization by direct regulation. The hazard of buying votes and short term peace from the various interest groups, will always be threatening to develop into something similar to the "tragedy of the commons" situation described above, where an increasing number of loyal supporters begin to question the equity of the system and their own interest in contributing to it.

This leads to the second conclusion noted above: that the distribution of the costs of the institutional structure defining the property rights have to be levied carefully and in a way acceptable to a large majority of the population.

The role of justice and equity in the development process seems in the general theory of development to have been underestimated. During the last years, however, human rights are often stressed in political statements (WCED 1987).

Senghaas (1982, 90) mentions "a moderate rather than gross inequality in the distribution of important resources" as one institutional prerequisite. But nowhere does he discuss the dynamic implication of an institutional complex one might label "the democratic rule-of-law state". One, in the present context, interesting contribution is Schnaiberg, Watts, and Zimmermann (1986). Their investigations into and concern for the role of distributive problems in environmental resource policy has got its political expression in the Brundtland report WCED (1987) and its insistence on distributive justice as a necessary goal for a policy intending to achieve sustainable development.

If the definition of property rights shapes the motivations of people in important ways, and non-compliance with the rules designed to ensure sustainable development entails significant losses of welfare, it becomes important how the laws are enforced and experienced by those subject to them. If the laws or the enforcement of them come to be seen as unfair, largescale hedging by those subject to the regulations, may put the regulatory framework in jeopardy through non-compliance or increased policing costs as effectively as the free rider problem discussed.

Here we again return to the problem of trust. People must believe in the security of their property. They must see that the distribution of the costs of maintaining the system is distributed equitably. And they must see that non-compliance with the necessary regulations is punished justly. But how is it possible for people to trust that the commitment of the state to any particular policy really is long-term and sincere? How can they monitor the equity of the taxes and the justice in the prosecution of the various types of free riders? How can one ensure that politicians and bureaucracy do not either misuse their power (military forces, police, corrupt use of tax funds), or that the political processes do not produce some kind of "tragedy of the open access state"?

One is tempted to speculate that maybe the importance of the protestant ethic may lie in the admonition of people to perform faithfully their duties both to king and God, and that this commitment was believed to be sincere. People came to trust the fairness of their bureaucrats as they from old on (at least in Scandinavia) had trusted the justice of their king.

In so far as the institutional framework shall be relied upon to supply the motivations for sustainable resource utilization, questions like these have to be posed and answered.

I. Equity and distributional justice in the theory of property rights

The discussion has introduced property rights as one institutional variable affecting the resource utilization. It has pointed out that welfare and equity considerations should enter into the definition of the property rights and their enforcement. Some steps in the direction of uncovering the connection between rules of utilization and degree of sustainability and the precise role

the state ought to have in this connection, will be attempted by a closer look at those elements of property rights theory particularly relevant for the utilization of "common property resources".

In particular, attention will be paid to the nature of common property, the way various types of resources may pose different problems for the design of the property rights system, and how various types of owners may react to the various types of property rights.

Defining characteristics of property relations in common property

Four types of ownership have been described (adapted from Bromley (1989a, 205)):

1. No ownership the open access resource, there are no group of people or legal person recognized as owner(s),
2. Common ownership an identifiable group of people are recognized as owners,
3. Private ownership the owner is one particular individual or legal person, and
4. State ownership the state as a legal person is recognized as owner.

Hohfeld (1913, 1917)¹⁰ has described property rights as rules specifying the relations between one (or more) owner(s) and all non-owners in regard of some entity the owner(s) regard as their property. His project was to describe legal rights in general in as precise language as possible, see Munzer (1990, 17-22).

The relation between owner and non-owners is described as an asymmetric relation characterized by four types of rights-claims from the owner, two concerning the use of his property, two concerning rules of exchange of possessions. The four rights-claims of the owner(s) are mirrored in four types of duties falling on the non-owners.

The four pairs of concepts are

1. rights duties,
2. privileges no rights,
3. powers liability,
4. immunities no powers.

¹⁰ See above Note 1 section on "The jurisprudence of property rights" (pages 10-13)

In Hohfeld (1913, 1917)'s scheme for a legal property relation, the ideal typical common property (see table below) can be said to be defined by three characteristics. They are

- the equality of all owners in their rights of access to and use of the common property,
- the right to appropriate any benefit from the use of the property, and
- the equality of all owners in decisions on whom other than owners can be granted access to the property and on what terms.

From the table below it is seen that the rights and privileges of the owners invites to a process resembling the game of chicken: who is able to appropriate more of the benefits? It is also seen that the powers of the owners invite each one of them to the game of holdout if a decision of admitting some new owner or, in general, a change of current uses involving outside interests, is pending.

These problems are rather obvious. But, as already noted, they very seldom appear in real life. Studies of so-called "primitive" societies show elaborate social structures regulating decision-making and utilization of common property resources (Berkes 1989). The development of legal systems of complex societies also show that the first problems they set out to regulate among owners of common property are the decision making on utilization and exchange of rights of the resources. The law gives the owners the necessary rights and powers to set up a "government" at the same time as it protects the individual owner against misuse of the power vested in such governments.

The actual problems of government of common property, and the need for the legal backing, will depend on the number of co-owners. Where the numbers of owners are few, it seldom is a problem. But in many countries, all or a large part of the land is in principle a "common" or in state ownership. The larger the number of "owners" the more the utilization process will resemble the utilization problems of the open access resource or the higher the policing costs will be. For once a government is installed; its costs have to be covered. The problems of taxation appear.

Table 7.3

Defining characteristics of property relations in common property

	Owners	Non-owners
Use aspects	rights	duties
	equal claims of access to the property	not to access the property or interfere in the access of the owners
	privilege	no rights
	to appropriate any benefit from using the property	that owners shall not appropriate benefits from using the property
Exchange aspects	powers	liability
	equal say in deciding who shall get access to the property	have to accept the terms set by the owners for getting access to the property
	immunities	no powers
	legal protection against non-owners wanting to usurp or transfer any of their rights or privileges	to decide on anything involving the rights and privileges of the owners

See also Bromley (1989a, 1989b).

Problems connected with type of ownership

The theoretically identified problems noted for a resource utilized through common ownership are in reality less than indicated, in so far as the decision rules used are a result of a historical process and the traditional society is not affected by major new outside forces. They are less because either the balance of forces (like traditional feuds and diseases) keep the inherent destabilizing societal practices in check or because traditional patterns of cooperation have been shaped to institutions (systems of property rights) circumventing the inherent irrationalities.

However, this does not hold for the true "no ownership" situations which seem to crop up in connection with the utilization of resources with no history in a society. In cases with no ownership, the problems identified in the stylized discussion of the common property resource are relevant and intensified because of the illegality of exclusion of any actor (or citizen).

While private ownership and state ownership escape the problems noted for common ownership and no ownership, they are not without problems relating to sustainable utilization of resources. The problems of common ownership and no ownership can be said to be connected to the balancing of the rate

of use in relation to the rate of renewal. If we can assume that private ownership implies a prohibitive penalty for not balancing the rate of use to the rate of renewal, the problems of private and state ownership can be said to be connected to unintended consequences (external diseconomies) from the use of the resource (waste disposal, crowding phenomena).

Of course, these also occur for common ownership and no ownership, but since the areas involved here usually are more extensive, the unintended consequences often are internal to the group of owners. They belong among the costs of exploiting the resource. If the problem of balancing the resource utilization against the rate of renewal is solved, there also will be a forum for discussion of the unintended consequences of the utilization.

The problems of these unintended consequences are twofold. They are connected with the costs of establishing extent and origin of the consequences. And they are connected with the problem of handling those actors who play the game of hold-out in the negotiations to find ways and means of containing the unintended consequences. Both problems would seem to call for a control agent in relation to the various private owners. It seems reasonable to suppose that the problems of state ownership will not be particularly different from those of private ownership in a society where private ownership is the mode, and very similar to the problems of common ownership in a society where that is the mode. What may cause problems is for the state to apply the same kind of regulations and controls to itself as owner as to private owners.

But how should the activities of a control agent be guided in the endeavour to define and enforce rules and regulations making the resource utilization sustainable?

Types of resources

While the legal property rights concern the relations among the actors in regard of the resource, little has so far been said about the resource itself. The various types of resources may require special consideration in the definition of property rights.

If one applies the concepts introduced for the classification of goods one

may analytically distinguish four important aspects of resources. In addition resources are special in that they are either renewable or depletable. The following discussion is much inspired by Ostrom and Ostrom (1977).

Table 7.4
Types of resources

The resource is	Consumers are	
	Excludable	Non-excludable
Divisible	1. private	2. positional
Indivisible	3. public	4. club

1. Private resources.

Money is the perfect, ideal typical, private resource. There are no problems of either divisibility or excludability. The possessor can transfer any part of such a resource to other actors or transform it to a wide variety of benefits, and has absolutely no problems excluding anybody from access to it. Most of what are called natural resources, from land and water to bulk commodities like grain or crude oil also fall into this category.

For some resources, however, it is impossible or illegal to exclude anyone from taking possession of a part. This may happen because the technology to exclude does not exist or because abundance makes it too expensive to exclude those who want a part or because equity considerations lead to the conclusion that everybody has a right to access to the resource. These resources can be called positional if the consumption of such resources by one actor may affect the benefits available to other consumers. Water will for example fit this description in several contexts. Downstream from the first user both the amount and quality of the water in a stream will be affected.

2. Positional resources.

Whenever non-excludability for a divisible resource exists, the number of consumers and the quantity consumed may affect the quality and quantity available to those not currently consuming the resource. The result, usually, is either some kind of queue to gain access (implying some kind of rationing rule ordering the queue) if there are bounds on the quantity available at any particular time, or, if there are too many consumers, the

result is a deteriorating quality of the resource, like the grazing land discussed above. The deteriorating quality may arise either because the use of the resource includes leaving some waste behind (e.g. water pollution) or because the rate of renewal of the resource is affected by the rate of consumption (biological resources).

3. Public resources.

If consumers are non-excludable and the basic resource is indivisible, there will be no actor in a position to exclude others from taking possession of the resource. Sunlight, trust in the legal system of the area, the language of a culture as a means of communication, etc.: the resource is there for the use by anyone wanting to. Nobody can deny it to anyone, nor can it be acquired partly.

However, sometimes those wanting to make use of a theoretically non-excludable and indivisible resource, like a public square, can experience crowding phenomena. If too many or too few users of a resource affect the utility of the resource for other marginal users, the resource may be called a club resource. The resource, even though indivisible, is not really non-excludable.

4. Club resources.

Knowledge and technology are typical examples of resources where possessors can exclude others from access and where the resource itself is indivisible. A part of a technology or a bit of knowledge may be something to possess or even bargain with, but not much of a resource in itself. It is a resource only if all of it is appropriated. However, the utility of the resource depends heavily on how many others possess the same resource. If too many possess it, its value decreases. If too few possess it, its potential value may never be realized. The utility of the resource is affected by crowding phenomena (too many or too few users).

Types of resources and types of ownership

It is interesting to note that the various types of resources thus identified have a certain correspondence to the types of ownership discussed above. In particular it would seem that a pure club resource might be suitable for common ownership like for example the stock of knowledge and know-how

sustaining a profession. A pure public resource would need no ownership and a pure positional resource, if that could be found, would, perhaps, require state ownership.

Most real resources will contain aspects of more than one of the types identified. The distinctions are, however, important for the design of property rights in that rules of transfer must depend on the possibility and cost of excluding some non-owner from the resource (the transaction costs and possibilities for generating externalities from enforcing a contract of transfer of rights). And it must take into consideration to what degree the resource (or more precisely the value of the resource) is divisible. If the value is indivisible it is most probably inalienable as well (like knowledge or skill once acquired). Conversely considerations of entitlements and equity may lead to considerations of inalienable rights. The rules defining and protecting such rights then has to conform to the rules governing club resources and public resources.

Property rights and sustainable development

If we apply the insights into property rights gained so far to the problems of sustainable resource development, the transaction costs and externality considerations may lead to some kind of regulated private property rights system as the solution. Taking further into account the problems of securing justice and equity, one sees that solving problems of transaction costs and externalities will hardly contribute to sustainable development unless all relevant actors of the society have an initial endowment of property rights giving them a minimum capability of long-term planning of their lives. Sustainable resource utilization requires long-term commitment on all decision making levels.

In real life the distribution of power and de facto property rights are often very skewed. In particular there are in many societies a substantial and often growing population without property except for their own labour power.

If a property rights system is designed presupposing that all actors have an initial minimum endowment of resources in addition to their own labour power (e.g. education or land), the implementation of this system in a

population where some part of it do not have the necessary initial endowment, will not do much to solve the problem of sustainable resource utilization. Even if one were able to disregard the humanitarian considerations and wanted to write off the "surplus population", it would be likely that transaction costs like the policing costs, i.e. the costs of protecting the rights of the owners against the non-owners, would be prohibitively high.

Without the will to distribute the initial endowment of property rights, the introduction of a property rights system designed to circumvent the irrationalities inherent in current utilization processes will do no good.

If a society is able to endow each citizen with a minimum initial bundle of resources, then the state should, at a minimum, make an effort to secure the fairness and validity of the transactions which the citizens enter into, rather than worry about any particular outcome of the actions. This is in any case important both to its authority and to the legitimation of the system, but it may also be a part of the motivation for a sustainable development. To further encourage a long-term view on the use of resources, the state also should make an effort to guarantee the long-term validity of a property relation. If loss of property is an everyday and frequent experience, no rational actor will take a long-term view on investment and use of resources.

Unsustainable utilization of a resource should be penalized with a minimum of costs. Overexploitation will, in the minimal state, carry its own penalty. Pollution does as well. But, in addition, pollution usually affects neighbours. Giving the neighbours legal remedies not only to stop polluting activities, but to appropriate the possible gain the polluter has had from the activity might prove effective. But in a welfare state the penalties of overexploitation and pollution sufficient in a minimal state are not acceptable.

The problem of appropriate penalties remains. But even agreeing on appropriate penalties is not enough. To enforce them one has to be able to distinguish criminal behaviour from simply ignorance and bad luck. What do seem to emerge as a conclusion is that both equity in initial distributions and a state resembling remarkable the democratic rule-of-law state are necessary prerequisites for achieving sustainable resource utilization.

APPENDIX

SOME DATA ON THE CONSUMPTION OF WELFARE GOODS ACCORDING TO CLASS¹¹

Use of the transportation system and the medical services

The arguments above have been about road systems and hospitals. The data available refer to travelling by any means, and to access to physicians or dentists.

1. Access to medical services

Both the requirement that the health system shall provide medical treatment for all, and the queuing system of rationing, indicate that use of the system ought to be strictly according to need. This means that if we control for need in terms of illness we should find no differences in the consumption of medical services according to income. This is exactly what Elstad (1991) finds in the Norwegian Health survey of 1985 (table 1). Here Elstad finds differences in need according to social class. The lower classes are more ill and thus more in need of health services. Uncontrolled for degree of illness, the lower classes consume more of the health services than the upper classes. This is also found by Townsend and Davidson (1992 [1982]) and Whitehead et al. (1988). But they argue the differences in illness are so large that if one were to control for need and take into the account longer consultations and the possibility of better quality of the services rendered upper class people, the higher classes will come out as those best served by the health system. This means that at least access to the medical services functions exactly as they are supposed to do.

Dental services in Norway are in our terms private goods. After the age of 18, people have to pay the dentist to take care of their teeth. Both the nature of the good and the needs of the consumer are comparable to those of the primary health services. Even the arguments for making it into a public good could be duplicated. It is, however, organized as a private good. When Elstad looks at differential use of dental services according to social class, he finds that class differences are significant and even large (table A.1).

¹¹ The observations presented here were collected during the writing of Berge (1991a).

Table A.1

Proportion having seen a physician and a dentist during the last year according to occupational activity, sex and social class*

		Dentist	Physician
Occupationally active			
Women	low status	78	81
	high status	82**	84
Men	low status	68	74
	high status	81***	73
Occupationally passive			
Women	low status	48	84
	high status	69***	78
Men	low status	31	80
	high status	45***	86

*The distinction between high and low status is based on occupation for those with an occupation and on household income for those without an occupation (Elstad 1991).

** Differences are significant at the 5% level.

*** Differences are significant at the 1% level.

Source: Elstad (1991), Table 3.

Access to the transportation system

The transportation system comprises a lot more than the roads and the daily travelling includes much more than commuting to work. Neither is the need concept as easily agreed upon as for the medical services. Also the use of the transportation system requires a resource input from the user unlike the medical system (but like the dental services). Even if travelling for the most part is an activity minimized rather than maximized, the arguments for no differences according to social class in the length of daily travel or time used for travelling do not follow. But accepting the argument that daily travelling is a necessity and a cost to be minimized rather than maximized, it would seem reasonable that upper class persons would try harder to keep the time used travelling low than to keep distances travelled short. This would reflect resource differentials among travellers. If there are need-differentials among occupational groups in addition to the resource differentials, there will be trade-offs between time used for travelling and cost of higher speed.

Data from the travelling behaviour survey of 1985 (Stangeby 1987) shows

both the higher resource input and the probable confounding effect of need differences.

Table A.2

Distance (in km) travelled and time (in min) used travelling each day according to socio-economic status.

	mean distance per trip travelled	mean number of trips per day	mean time used per trip travelled	distance travelled per day	travelling time per day
Unskilled labour	12.6	3.3	21.8	41.6	71.9
Skilled labour	9.4	3.5	20.2	32.9	70.7
Lower white collar	8.4	3.3	18.3	27.7	60.4
Middle white collar	12.3	3.6	23.5	44.3	84.6
Higher white collar	16.1	3.7	24.9	59.6	92.1
Farmers/fishermen	13.1	2.7	25.9	35.4	69.9
Other self-employed	14.7	3.6	21.4	52.9	77.0
Students	8.3	4.1	19.9	34.0	81.6
Pensioners	8.2	2.0	20.9	16.4	41.8
Work at home	8.0	2.5	19.9	20.0	49.3
Others	14.8	2.9	27.1	42.9	78.6
All persons	10.8	3.2	22.0	34.6	70.4

Source: Stangeby (1987), figure 10, 11, and 12.

Table A.2 shows that those in higher white collar occupations travel the longest distances and use the most time travelling each day. Pensioners and students travel the shortest distances and use the least time, but not much less than those in lower white collar occupations who again are below skilled and unskilled labour.

Travelling differentials measured in km are however larger than those measured in minutes. This comes out clearly in table A.3 where average speed of daily travelling as well as relative differentials for speed, distance and time has been computed. Speed may be used as an indicator for the cost of travelling. Those putting the most resources (time and the cost of speed) into travelling to buy distance are the higher white collar occupations. The self-employed other than farmers/ fishermen buy the highest speed, but

use only about the same time travelling as the average person. Except for the higher white collar occupations and the self-employed other than farmers and fishermen the differentials in travelling speed are small compared to differentials in distance and time. This may presumably be attributed to the subsidies which makes travelling at the average speed available and fairly cheap for all. If distance is taken as a need measure, there seems to be some trade-offs between time and speed.

Table A.3

Travelling speed and relative inequality in speed, distance and time travelled according to socio-economic groups

	Speed km per hour	relative speed	relative distance	inequalities in time
Unskilled labour	34.7	118	120	102
Skilled labour	27.9	95	95	100
Lower white collar	27.5	93	80	86
Middle white collar	31.4	106	128	120
Higher white collar	38.8	132	172	131
Farmers/fishermen	30.4	103	102	99
Other self-employed	41.2	140	152	109
Students	25.0	85	98	116
Pensioners	23.5	80	47	59
Work at home	24.3	82	58	70
Others	32.7	111	124	112
All persons	29.5	100	100	100

Source: Table A.2 above.

If we make the same calculations of time and distance used travelling for income groups as for occupational groups, we get much the same picture (tables A.4 and A.5). Particularly for the four middle income groups, the linear increase in the use of both time and resources for buying speed is impressive. The deviance of the lowest as well as the highest income group may be interpreted in several ways, but the unreliability of both particularly low and high incomes are well known.

Table A.4
Distance (in km) travelled and time (in min) used travelling each day according to income groups

	mean number of trips per day	mean length of trips	mean time used per trip travelled	distance travelled per day	travelling time per day
Income:					
less than 40 000	2.5	9.8	24.1	24.5	60.3
40 - 79 000	2.3	6.7	21.8	15.4	49.5
80 - 159 000	3.0	9.5	21.2	28.5	63.6
160 - 239 000	3.5	10.5	20.2	36.8	70.7
240 - 319 000	3.6	14.2	23.4	51.1	83.5
320 and more	4.0	11.8	20.5	47.2	82.0
All persons	3.2	10.8	22.0	34.6	70.4

Source: Stangeby (1987), figure 13, 14, and 15.

Table A.5
Travelling speed and relative inequalities of speed, distance and time travelled according to income groups

Income:	Speed	Relative inequalities in		
	km per hour	speed	distance	time
less than 40 000	24.4	83	71	86
40 - 79 000	18.7	63	45	70
80 - 159 000	26.9	91	82	90
160 - 239 000	31.2	106	106	100
240 - 319 000	36.7	124	148	119
320 and more	34.5	117	136	116
All persons	29.5	100	100	100

Source: Table A.4 above.

REFERENCES

- Abbott, Andrew. 1988. *The system of professions : an essay on the division of expert labor*. Chicago: University of Chicago Press.
- Abrahamsson, Bengt. 1985. "Vad er interessant med professioner?" In *Professionaliseringsfällan: Vuxenutbildning, arbetsdelning, yrkeskunnande*, edited by Donald Broady, 19-23. Stockholm: Carlssons Bokförlag.
- Akerlof, George. 1970. "The market for "lemons": quality, uncertainty, and market mechanism." *Quarterly Journal Of Economics* 84:489-500.
- Alchian, Armen A. 1965. "Some Economics of Property Rights." *Il Politico* 30 (4):816-829.
- Alchian, Armen A., and Harold Demsetz. 1973. "The Property Right Paradigm." *The Journal of Economic History* 33 (01):16-27. doi: doi:10.1017/S0022050700076403.
- Appelstrand, Marie. 2001. *Public participation as an incentive in forest decision-making processes, Paper to COST Action E-19*. Aberdeen: University of Aberdeen.
- Apter, David Ernest. 1987. *Rethinking development : modernization, dependency, and postmodern politics*. Newbury Park: Sage.
- Axelrod, Robert. 1984. *The Evolution of Cooperation*. New York: Basic Books.
- Axelrod, Robert. 1997. *The Complexity of Cooperation. Agent Based Models of Competition and Collaboration*. Princeton: Princeton University Press.
- Baland, Jean-Marie, and Jean-Philippe Platteau. 1996. *Halting Degradation of Natural Resources. Is there a Role for Rural Communities?* Oxford: Clarendon Press.
- Bardhan, Pranab, ed. 1989. *The Economic Theory of Agrarian Institutions*. Oxford: Clarendon.
- Baumol, William J., and Wallace E. Oates. 1988. *The Theory of Environmental Policy. Second Edition*. Cambridge: Cambridge University Press.
- Berg, Joyce, John Dickhaut, and Kevin McCabe. 1995. "Trust, Reciprocity, and Social History." *Games and Economic Behavior* 10 (1):122-142. doi: <http://dx.doi.org/10.1006/game.1995.1027>.
- Berge, Erling. 1986. "On the Limits of Social Ecological Explanations in Comparative Research." In *Comparative Urban Research*, edited by C.S. Yadav, 59-65. New Delhi: Naurang Rai Concept Publishing Company.
- Berge, Erling. 1988a. Litt om engelsk rettstenking om eigedom. In *INAS-NOTAT* 88:7. Oslo: Institute of Applied Social Research.
- Berge, Erling. 1988b. "Nokre sentrale omgrep i engelsk rettstenking om eigedom (Some Central Concepts of the English Jurisprudence of Property)." *Kart og Plan* 48 (4):383-388.
- Berge, Erling. 1989. "Eigedomsinstitusjonen som styringsinstrument." In *Perspektiver på eiendom*, edited by Kjetil Steinsholt, 2-71. Ås: Institutt for jordskifte og arealplanlegging, NLH.
- Berge, Erling. 1990a. "Property Rights Theory and Sustainable Resource Utilization." International Symposium on "The Functions of Law in the Development of Welfare Societies", Oslo, 23-26 August.
- Berge, Erling. 1990b. "Property Rights Theory as a Basis for Organizing Resource Utilization for a Sustainable Development." European Association of Development Research and Training Institutes, 6th General Conference, Oslo, 27.-30. June
- Berge, Erling. 1990c. Some Notes Towards a Property Rights Perspective on Institutional Change in the Welfare State. In *INAS-NOTAT 1990:9*. Oslo: Institutt for anvendt sosialvitenskapelig forskning (INAS).
- Berge, Erling. 1991a. "On the Nature of Welfare Goods." *Sosiologisk Årbok* 7:55-73.

- Berge, Erling. 1991b. "On the Regulation of Professions." In *Report from the First National Conference of Sociology, Geiranger, May 1990*, edited by Tore Lindbekk, Fredrik Engelstad and Ivar Frønes, 221-246. Oslo: Norges Allmennvitenskapelige Forskningsråd.
- Berge, Erling. 1991c. "Property Rights Theory and Sustainable Resource Utilization." In *Vilhelm Aubert Memorial Symposium 1990. Volume 1 Social Inequality and Social Norms*, edited by Fredrik Engelstad, 158-180. Oslo: Institute for Social Research.
- Berge, Erling. 1992. "Democracy and Human Rights as Conditions for Sustainable Resource Utilization." III. World Conference of IASCP, Washington, 18-20 September 1992.
- Berge, Erling. 1994. "Unintended Consequences of Purposive Action and the Provision of Welfare." Workshop on the Workshop, Bloomington, IN, USA, 16-18 June, 1994.
- Berge, Erling. 2002. "Varieties of Property Rights to Nature. Some Observations on Landholding and Resource Ownership in Norway and England." In *Forest Law and Environmental Legislation. Contributions of the IUFRO Research Group 6.13 Proceedings VII*, edited by Franz Schmithüsen, Georg Iselin and Peter Herbst, 14-33. Zürich: ETH.
- Berge, Erling. 2011. "Eigedomsregime." *Kart og Plan* 71 (3):172-179.
- Berge, Erling, and Eda Kranakis. 2011. "Technology-dependent commons: The radio spectrum." *International Journal of the Commons* 5 (1):86-91.
- Berge, Erling, and Berit Aasen. 2001. "The social and cultural environment of National Forest Programmes." In *National Forest Programmes. Social and Political Context. Proceedings of the Cost E-19, 18th-21th October 2000, Madrid, Spain*, edited by Peter Glück, José María Solano López, Eduardo Rojas-Briales, Heiner Schanz and Willi Zimmermann, 91-104. Madrid: Ministerio de Medio Ambiente.
- Berger, Peter L., and Thomas Luckmann. 1966. *The Social Construction of Reality*. New York: Doubleday.
- Berkes, Fikret, ed. 1989. *Common Property Resources. Ecology and Community-Based Sustainable Development*. London: Belhaven Press.
- Black, Henry Campbell. 1990. *Black's Law Dictionary. Sixth Edition*. St. Paul: West Publishing.
- Blaikie, Piers, and H. C. Brookfield. 1987. *Land degradation and society*. Vol. 940, *University paperbacks*. London: Methuen.
- Bloch, P.B. 1974. *Equality of distribution of Police Services: A Case Study of Washington D.C.* Washington D. C. .
- Bourdieu, Pierre. [1979] 1984. *Distinction. A social critique of the judgement of taste*. Translated by Richard Nice. London: Routledge.
- Bowles, Samuel, and Herbert Gintis. 2011. *A Cooperative Species - Human Reciprocity and Its Evolution*. Princeton; Oxford: Princeton University Press.
- Boyd, Robert, and Peter J. Richerson. 1985. *Culture and the evolutionary process*. Chicago: University of Chicago Press.
- Boyd, Robert, and Peter J. Richerson. 1994. "The Evolution of Norms: An Anthropological View." *Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift für die gesamte Staatswissenschaft* 150 (1):72-87.
- Boyd, Robert, and Peter J. Richerson. 2005. *The origin and evolution of cultures*. Oxford: Oxford University Press.
- Bramness, Gunnar, and Vidar Christiansen. 1976. *Køer som rasjoneringsmetode : en teori om ressurskrevende allokeringssystemer og noen momenter i teorien om optimale offentlige investeringer*. [2. utg.]. ed. Vol. 13. april 1973, *Memorandum (Universitetet i Oslo. Sosialøkonomisk institutt : trykt utg.)*. Oslo: Universitetsforlaget.

- Broady, Donald. 1985. *Professionaliseringsfällan: Vuxenutbildning, arbetsdelning, yrkeskunnande*. Stockholm: Carlssons Bokförlag.
- Bromley, Daniel W. 1989a. *Economic Interests and Institutions. The Conceptual Foundations of Public Policy*. New York: Basil Blackwell.
- Bromley, Daniel W. 1989b. "Property relations and economic development: The other land reform." *World Development* 17 (6):867-877. doi: [http://dx.doi.org/10.1016/0305-750X\(89\)90008-9](http://dx.doi.org/10.1016/0305-750X(89)90008-9).
- Brouwer, Roland. 1995. *Planting Power. The Afforestation of the Commons and State Formation in Portugal. Ph.D. dissertation*. Wageningen: Landbouwniversiteit Wageningen.
- Buck, Susan. 1998. *The Global Commons. An Introduction*. Washington D.C.: Island Press.
- Camerer, Colin F. 2003. *Behavioral Game Theory. Experiments in Strategic Interaction*. Princeton: Princeton University Press.
- Ciriacy-Wantrup, S. V., and Richard C. Bishop. 1975. "Common Property as a Concept in Natural Resources Policy." *Natural Resources Journal* 15:713-727.
- Coase, Ronald H. 1937. "The Nature of the Firm." *Economica* 4 (16):386-405. doi: 10.2307/2626876.
- Coase, Ronald H. 1960. "The Problem of Social Cost." *The Journal of Law and Economics* 3 (Oct.):1-44.
- Coase, Ronald H. 1991. "The Institutional Structure of Production. The 1991 Alfred Nobel Memorial Prize Lecture in Economic Sciences." In *Essays on Economics and Economists*, 3-14. Chicago: The University of Chicago Press.
- Coleman, James S. 1990a. "The Emergence of Norms." In *Social Institutions. Their Emergence, Maintenance, and Effects*, edited by Michael Hechter, Karl-Dieter Opp and Reinhard Wippler, 35-59. Berlin: Walter de Gruyter.
- Coleman, James S. 1990b. *Foundations of social theory*. Cambridge, Mass: Belknap Press.
- Commons, John R. 1924. *Legal Foundations of Capitalism*. New York: Macmillan.
- Cornes, Richard, and Todd Sandler. 1986. *The Theory of Externalities, Public Goods, and Club Goods*. Cambridge: Cambridge University Press.
- Deaton, Angus, and John Muellbauer. 1980. *Economics and consumer behavior*. Cambridge: Cambridge University Press.
- Demsetz, Harold. 1967. "Toward a Theory of Property Rights." *The American Economic Review* 57 (2):347-359.
- Denzau, Arthur T., and Douglass C. North. 1994. "Shared Mental Models: Ideologies and Institutions." *Kyklos* 47 (1):3-31. doi: 10.1111/j.1467-6435.1994.tb02246.x.
- Douglas, Mary. 1986. *How Institutions Think*. London: Routledge & Kegan Paul.
- Eggertsson, Thráinn. 1990. *Economic Behaviour and Institutions*. Cambridge: Cambridge University Press.
- Eisenstadt, Shmuel N. 1968. "Social Institutions." In *International Encyclopedia of the Social Sciences*, 409-429. New York: The Macmillan Company & The Free Press.
- Ellickson, Robert C. 1991. *Order without law. How Neighbors Settle Disputes*. Cambridge: Harvard University Press.
- Elstad, Jon Ivar. 1991. "Sosial skjevfordeling av legetjenestene 1975-1985." In *Helse i Norge. Sykdom, livsstil og bruk av helsetjenester*, edited by Torbjørn Moun and Tor Bjerkedal. Oslo: Gyldendal.
- Elster, Jon. 1985. *Making Sense of Marx*. Cambridge: Cambridge University Press.
- Ensminger, Jean Evelyn. 1996. "Culture and property rights." In *Right to nature: ecological, economic, cultural and political principles of institutions for the environment.*, edited by Susan Hanna, Carl Folke and Karl-Göran Mäler. Washington DC: Island Press.

- Enstad, Johannes Due, and Henning Finseraas. 2024. "Moralske intuisjoner og politiske orienteringer blant norske velgere: Moral Intuitions and Political Orientations among Norwegian Voters." *Tidsskrift for samfunnsforskning* 65 (1):1-23.
- Fehr, Ernst, and Herbert Gintis. 2007. "Human Motivation and Social Cooperation: Experimental and Analytical Foundations." *Annual Review of Sociology* 33 (1):43-64. doi: doi:10.1146/annurev.soc.33.040406.131812.
- Fehr, Ernst, and Simon Gächter. 2000. "Cooperation and Punishment in Public Goods Experiments." *The American Economic Review* 90 (4):980-994.
- Firmin-Sellers, Kathryn, and Patrick Sellers. 1999. "Expected failures and unexpected successes of land titling in Africa." *World Development* 27 (7):1115-1128.
- Foster, Peggy. 1983. *Access to welfare : an introduction to welfare rationing, Studies in social policy*. London: Macmillan.
- Freidson, Eliot. 1986. *Professional powers : a study of the institutionalization of formal knowledge*. Chicago, Ill: Univ. of Chicago Press.
- Freidson, Eliot. 1987. "Professionals and amateurs in the welfare state." In *Applied research and structural change in modern society*, edited by Lise Kjølørød, Anders Ringen, Kari Skrede and Mariken Vaa, 13-31. Oslo: Institutt for anvendt sosialvitenskapelig forskning.
- Fritzbøger, Bo. 1994. "Dansk skovlandbrug 1400-1800." *Bol og By: Landbohistorisk Tidsskrift* 10 (1):8-25.
- Furubotn, Eirik G., and Svetozar Pejovich. 1974. *The economics of property rights*. Cambridge, Mass.: Ballinger.
- Galbraith, John Kenneth. 1973. *Economics and the public purpose*. Boston: Houghton Mifflin.
- Gamarnikow, Eva, David Morgan, June Purvis, and Daphne Taylorson, eds. 1983. *The Public and the Private*. Aldershot: Gower, 1986.
- Gerhardt, Uta. 1989. *Ideas about illness : an intellectual and political history of medical sociology, New studies in sociology*. Basingstoke: Macmillan.
- Gibson, Clark C., Krister Andersson, Elinor Ostrom, and Sujai Shivakumar. 2005. *The Samaritan's Dilemma: The Political Economy of Development Aid*. Oxford: Oxford University Press.
- Gibson, Clark C., Elinor Ostrom, and Toh-Kyeong Ahn. 1998. Scaling Issues in the Social Sciences: A Report for the International Human Dimensions Program. In *IHDP Working Paper*. Bonn: International Human Dimensions Program (IHDP).
- Giddens, Anthony. 1981. *A Contemporary Critique of Historical Materialism. Vol.1 Power, property and the state*. London: Macmillan.
- Giddens, Anthony. 1984. *The Constitution of Society*. Cambridge: Polity Press.
- Gintis, Herbert. 2000. *Game Theory Evolving. A Problem-Centered Introduction to Modeling Strategic Interaction*. Princeton: Princeton University Press.
- Gintis, Herbert. 2007. "The evolution of private property." *Journal of Economic Behavior & Organization* 64 (1):1-16.
- Gintis, Herbert. 2009. *The Bounds of Reason. Game Theory and the Unification of the Behavioral Sciences*. Princeton, NJ: Princeton University Press.
- Gintis, Herbert, Samuel Bowles, Robert Boyd, and Ernst Fehr, eds. 2005. *Moral Sentiment and Material Interest. The Foundations of Cooperation in Economic Life*. Cambridge, MA: The MIT Press.

- Glück, Peter, Américo Carvalho Mendes, Ine Neven, Erling Berge, Karl Høgl, Michael Pregernig, Heiner Schanz, Margaret Shannon, and Johannes Voitleithner, eds. 2003. *Making NFPs Work: Supporting Factors and Procedural Aspects, Publication Series of the Institute of Forest Sector Policy and Economics*. Vienna: Institute of Forest Sector Policy and Economics.
- Godelier, Maurice. [1984] 1986. *The Mental and the Material*. London: Verso.
- Gordon, H. Scott. 1954. "The Economic Theory of a Common-Property Resource: The Fishery." *Journal of Political Economy* 62 (2):124-142. doi: 10.2307/1825571.
- Graeber, David, and David Wengrow. 2021. *The dawn of everything : a new history of humanity*. New York: Farrar, Straus and Giroux.
- Granovetter, Mark, and Roland Soong. 1986. "Threshold models of interpersonal effects in consumer demand." *Journal of Economic Behavior & Organization* 7 (1):83-99.
- Haidt, Jonathan. 2007. "The New Synthesis in Moral Psychology." *Science* 316 (5827):998-1002. doi: doi:10.1126/science.1137651.
- Hann, C. M., ed. 1998. *Property relations. Renewing the anthropological tradition*. Cambridge: Cambridge University Press.
- Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science* 162 (3859):1243-1248.
- Hardin, Russell. 1982. *Collective Action*. Baltimore: The Johns Hopkins University Press.
- Herigstad, Helge. 1986. *Inntekt og offentlege ytingar*. Vol. 86/2, *Rapporter fra Statistisk sentralbyrå (trykt utg.)*. Oslo.
- Hirsch, Fred. [1976] 1978. *Social Limits to Growth*. London: Routledge & Kegan Paul.
- Hobbes, Thomas. [1651] 1987. *Leviathan*. London: Penguin.
- Hohfeld, Wesley Newcomb. 1913. "Some fundamental legal conceptions as applied in judicial reasoning." *Yale Law Journal* 23:16-59.
- Hohfeld, Wesley Newcomb. 1917. "Fundamental legal conceptions as applied in judicial reasoning." *Yale Law Journal* 26:710-770.
- Hollowell, Peter, ed. 1982. *Property and Social Relations*. London: Heinemann.
- Honoré, A. M. 1961. "Ownership." In *Oxford Essays in Jurisprudence*, 107-147. Oxford: Oxford University Press.
- Huntington, Samuel P. 1957. *The soldier and the state : the theory and politics of civil-military relations*. Cambridge: Belknap.
- Huttman, John Peter. 1989. "The Decline of Welfare Goods Consumption In Eastern Europe." 29th World Congress of IIS, Rome.
- Illich, Ivan. 1976. *Medical Nemesis: The Expropriation of Health*. Pantheon Books.
- Jackson, J. A. 1970. *Professions and professionalization*. Vol. 3, *Sociological studies*. Cambridge: Cambridge University Press.
- Johnson, Terence J. 1972. *Professions and power, Studies in sociology*. London: Macmillan.
- Joyce, Richard. 2006. *The Evolution of Morality*. Cambridge, MA: MIT Press.
- Judge, Ken. 1979. "Resource allocation in the Welfare State: Bureaucrats or Prices?" *Journal of Social Policy* 8 (3):371-382.
- Judge, Ken F., and Martin R. J. Knapp. 1985. "Efficiency in the production of welfare: the public and the private sector compared." In *The Future of Welfare*, 131-149. Oxford: Basil Blackwell.
- Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47 (2):263-292.
- Kahneman, Daniel, and Amos Tversky. 2000. *Choices, values, and frames*. Cambridge: Cambridge University Press.
- Kielland, Else. 1986. "Privatisering-troll med mange hoder." *Tidsskrift for samfunnsforskning* 27 (3):195-216.

- King, Anthony. 1989. "A troubled year for Tories." *The Economist: The World in 1990*:49-51.
- Klein, Rudolf, and Michael O'Higgins, eds. 1985. *The Future of Welfare*. Oxford: Blackwell.
- Knight, Jack, and Itai Sened. 1995. *Explaining social institutions*. Ann Arbor: University of Michigan Press.
- Knutsen, Oddbjørn. 1989. *Sosiale tjenester og velferdsstatens yrker: særtrekk, modeller og hypoteser for komparativ forskning*. Vol. INAS-RAPPORT 1989:1., Oslo: Institutt for sosialforskning.
- Korpi, Walter. 1978. *The working class in welfare capitalism : work, unions and politics in Sweden, International library of sociology*. London: Routledge & Kegan Paul.
- Kristensen, Ole P. 1984. "Privatisering: Modernisering af den offentlige sektor eller ideologisk korstog." *Nordisk Administrativt Tidsskrift* 65 (2):97-120.
- Le Grand, Julian. 1982. *The strategy of equality : redistribution and the social services*. London: Allen & Unwin.
- Le Grand, Julian, and Ray Robinson, eds. 1984. *Privatisation and the Welfare State*. London: Routledge.
- Le Grand, Julian, and Ray Robinson. 1976. *The Economics of Social Problems* London: Macmillan.
- Levine, S. , and M. A. Kozloff. 1978. "The Sick Role: Assessment and Overview." *Annual Review of Sociology* 4 (1):317-343. doi: 10.1146/annurev.so.04.080178.001533.
- Lewis, David K. 1986. *Convention: a philosophical study*. Basil Blackwell: Oxford.
- Locke, John. [1690] 1986. *Two Treatises of Government*. London: Dent.
- Lorentzen, Håkon. 1987. "Privatisering!: Begreppets innhold og implikasjoner." *Tidsskrift for samfunnsforskning* 28 (4):259-280.
- Lundqvist, Lennart J. 1986. *Housing policy & equality : a comparative study of tenure conversions and their effects*. London: Croom Helm.
- Macfarlane, Alan. 1978. *The origins of English individualism : the family, property and social transition*. Oxford: Blackwell.
- Macpherson, C. B. 1987. *The rise and fall of economic justice and other essays, Oxford paperbacks*. Oxford: Oxford University Press.
- Mann, Michael. 1986. *The sources of social power : Vol. 1 : A history of power from the beginning to A.D. 1760*. Vol. Vol. 1. Cambridge: Cambridge University Press.
- March, James G., and Johan P. Olsen. 1984. "The New Institutionalism: Organizational Factors in Political Life." *The American Political Science Review* 78 (3):734-749.
- March, James G., and Johan P. Olsen. 1989. *Rediscovering Institutions. The Organizational Basis of Politics*. New York: Free Press.
- March, James G., and Johan P. Olsen. 1994. "Institutional Perspectives on Governance." In *Systemrationalität und Partalinteresse: Festschrift für Renate Mayntz/ Hans-Ulrich Derlien.* , 249-270. Baden-Baden: Nomos Verlagsgesellschaft.
- March, James G., and Johan P. Olsen. 1996. "Institutional Perspectives on Political Institutions." *Governance* 9 (3):247-264. doi: <https://doi.org/10.1111/j.1468-0491.1996.tb00242.x>.
- Marwell, Gerald , Pamela E. Oliver, and Ralph Prahl. 1988. "Social Networks and Collective Action: A Theory of the Critical Mass. III." *American Journal of Sociology* 94 (3):502-534.
- Marx, Karl. 1867. *Capital A Critique of Political Economy*. 3 vols. Vol. I. New York: International Publishers.
- Marx, Karl 2008 [1858]. *Grundrisse : foundations of the critique of political economy (edited by Marcello Musto), Grundrisse der Kritik der politischen Ökonomie*. Abingdon: Taylor & Francis.

- McCay, Bonnie J., and Svein Jentoft. 1998. "Market or Community Failure? Critical Perspectives on Common Property Research." *Human Organization* 57 (1):21-29.
- McKean, Margaret. 2000. "Common Property: What Is It, What Is It Good For, and What Makes It Work?" In *People and Forests: Communities, Institutions, and Governance*, edited by Clark Gibson, Margaret McKean and Elinor Ostrom, 27-55. Cambridge, MA: MIT Press.
- Meade, James E. 1973. *The theory of economic externalities : The control of environmental pollution and similar social costs*. Vol. 2, *Institut universitaire de hautes etudes internationales. Collection d'economie internationale*. Leiden: Sijthoff.
- Meidinger, Errol. 2008. "Property Law for Development Policy and Institutional Theory: Problems of Structure, Choice, and Change." In *The Mystery of Capital and the Construction of Social Reality*, edited by Barry Smith, David M. Mark, and Isaac Ehrlich, 193-227. Chicago: Open Court.
- Merton, Robert K. 1936. "The Unanticipated Consequences of Purposive Social Action." *American Sociological Review* 1 (6):894-904. doi: 10.2307/2084615.
- Merton, Robert K., Aaron Rosenblatt, and Thomas F. Gieryn. 1982. *Social Research and the Practicing Professions*: Abt Books.
- Miliband, Ralph. 1969. *The state in capitalist society*. London: Weidenfeld and Nicolson.
- Mill, John Stuart. 1976. *John Stuart Mill on Politics and Society. Selected and Edited by Geraint L Williams*. Glasgow: Fontana.
- Mishan, Ezra J., and Edward J. Mishan. 1981. *Introduction to Normative Economics*. Oxford: Oxford University Press.
- Mishra, Ramesh. 1984. *The Welfare State in Crisis: Social Thought and Social Change*. New York: St. Martin's Press.
- Munzer, Stephen R. 1990. *A Theory of Property*. Cambridge: Cambridge University Press.
- National Consumer Council, Chartered Institute of Public Finance and Accountancy, and Public Finance Foundation. 1987. "Performance measurement and the consumer." London.
- Newby, Howard, Colin Bell, David Rose, and Peter Saunders. 1978. *Property, Paternalism, and Power. Class and Control in Rural England*. London: Hutchinson.
- Nichols, Donald, Eugene Smolensky, and T Nicolaus Tideman. 1971. "Discrimination by waiting time in merit goods." *The American Economic Review* 61 (3):312-323.
- North, Douglass C. 1990. *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.
- North, Douglass C. 1999. "Dealing with a Non-Ergodic World: Institutional Economics, Property Rights, and the Global Environment." *Duke Environmental Law and Policy Forum* 10 (1):1-12.
- North, Douglass C., and Robert Paul Thomas. 1973. *The Rise of the Western World. A New Economic History*. Cambridge: Cambridge University Press.
- North, Douglass C., and Robert Paul Thomas. 1977. "The First Economic Revolution." *Economic History Review* 30:229-241.
- Nozick, Robert. 1974. *Anarchy, State, and Utopia*. Oxford: Basil Blackwell.
- O'Connor, James. 1973. *The fiscal crisis of the state*. New York: St. Martin's Press.
- OECD. 1981. *The welfare state in crisis : an account of the Conference on Social Policies in the 1980s, OECD, Paris, 20-23 October 1981 [i.e. 1980]*. Paris: OECD.
- Okoth-Ogendo, W. H. O. 1986. "The perils of land tenure reform: the case of Kenya." In *Land Policy and Agriculture in Eastern and Southern Africa*, edited by J. W. Artzen, L. D. Ngongco and S. D. Turner. Tokyo: The United Nations University.
- Olson, Mancur. 1965. *The Logic of Collective Action. Public Goods and the Theory of Groups*. Cambridge: Harvard University Press.

- Ostrom, Elinor. 1990. *Governing the Commons. The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Ostrom, Elinor. 1998. "A Behavioral Approach to the Rational Choice Theory of Collective Action. Presidential Address American Political Science Association 1997." *American Political Science Review* 92 (1):pp.1-22.
- Ostrom, Elinor. 1999. "Coping with the Tragedies of the Commons." *Annual Review of Political Science* 2:493-535.
- Ostrom, Elinor. 2000. Private and Common Property Rights. In *Encyclopedia of Law and Economics, vol. II. Civil Law and Economics*, edited by Boudewijn Bouckaert and Gerrit De Geest. Cheltenham: Edward Elgar.
- Ostrom, Elinor. 2005. *Understanding Institutional Diversity*. Princeton: Princeton University Press.
- Ostrom, Elinor. 2010. "Polycentric systems for coping with collective action and global environmental change." *Global Environmental Change* 20 (4):550-557. doi: 10.1016/j.gloenvcha.2010.07.004.
- Ostrom, Elinor, Roy Gardner, and James Walker. 1994. *Rules, Games and Common-pool Resources*. Michigan: University of Michigan Press.
- Ostrom, Elinor, and Edella Schlager. 1996. "The Formation of Property Rights." In *Rights to Nature. Ecological, Economic, Cultural, and Political Principles of Institutions for the Environment.*, edited by Susan Hanna, Carl Folke and Karl-Göran Mäler, 127-156. Washington DC: Island Press.
- Ostrom, Vincent. 1993. "Cryptoimperialism, Predatory States, and Self-Governance." In *Rethinking Institutional Analysis and Development. Issues, Alternatives, and Choices*, 43-68. San Francisco: ICS Press.
- Ostrom, Vincent, and Elinor Ostrom. 1977. "Public Goods and Public Choices." In *Alternatives for Delivering Public Services: Toward Improved Performance*, edited by E. S. Savas, 7-49. Boulder, CO: Westview Press.
- Otnes, Per. 1986. "Visible cities. Saundersian meditations on the concept of collective consumption." *Scandinavian Housing and Planning Research* 3 (4):217-232.
- Otnes, Per, ed. 1988. *The Sociology of Consumption : An Anthology*. Oslo: Solum Forlag.
- Page, Benjamin I. 1983. *Who Gets What from Government*. Berkeley, CA: University of California Press.
- Pálsson, Gísli. 1998. "Learning by fishing: practical engagement and environmental concerns." In *Linking Social and Ecological Systems. Management practices and social mechanisms for building resilience*, edited by Fikret Berkes, Carl Folke and Johan Colding, 48-66. Cambridge: Cambridge University Press.
- Parsons, Talcott. 1968. "Professions." In *International encyclopedia of the social sciences.*, edited by David L. Sills, Vol. 12, 536-547. New York: The Free Press.
- Perkin, Harold. 1981. *Professionalism, Property and English Society since 1880, The Stenton Lecture 1980*. Reading: University of Reading.
- Posner, Richard A. 1972. *The Economic Analysis of Law, Second Edition 1977*. Boston: Little Brown.
- Proudhon, Pierre-Joseph. 1840. *What is Property? : An Inquiry Into the Principle of Right and of Government*. Auckland: The Floating Press.
- Rackham, Oliver. 1986. *The History of the Countryside. The full fascinating story of Britain's landscape*. London: Dent.
- Ramsøy, Natalie Rogoff, and Lise Kjølørød. 1985. *Velferdsstatens yrker*. Vol. 85:3, *INAS rapport (trykt utg.)*. Oslo: Institutt for anvendt sosialvitenskapelig forskning.
- Rawls, John. 1971. *A Theory of Justice*. Cambridge, Mass: The Belknap Press of Harvard University Press.

- Reeve, Andrew. 1986. *Property*. London: Macmillan.
- Reich, Charles A. 1964. "The New Property." *Yale Law Journal* 73 (5):733-787.
- Richerson, Peter J., and Robert Boyd. 2005. *Not by genes alone : how culture transformed human evolution*. Chicago: University of Chicago Press.
- Ringen, Stein. 1987. "The possibility of politics : a study in the political economy of the welfare state." Clarendon Press.
- Roemer, John E. 1988. *Free to Lose: An Introduction to Marxist Economic Philosophy*. 1 ed. Cambridge: Cambridge: Harvard University Press.
- Rothstein, Bo. 2005. *Social traps and the problem of trust*. Cambridge: Cambridge University Press.
- Salamon, Sonya. 1984. "Ethnic origin as explanation for local land ownership patterns." *Research in rural sociology and development (USA)* 1.
- Salamon, Sonya. 1985. "Ethnic Communities and the Structure of Agriculture." *Rural Sociology* 50 (3).
- Salamon, Sonya. 1995. "Cultural dimensions of land tenure in the United States." *Who Owns America? Land and Resource Tenure Issues in a Changing Environment (1995: Madison, Wis.)*.
- Samuelson, Paul A. 1954. "The Pure Theory of Public Expenditure." *The Review of Economics and Statistics* 36 (4):387-389. doi: 10.2307/1925895.
- Sandler, Todd. 1992. *Collective Action. Theory and Applications*. London: Harvester Wheatsheaf.
- Saunders, Peter. 1986. *Social theory and the urban question*. 2nd ed. London: Hutchinson.
- Savas, E. S. 1982. *Privatizing the public sector : how to shrink government, Chatham House series on change in American politics*. Chatham, N.J: Chatham House Publishers.
- Schlager, Edella, and Elinor Ostrom. 1992. "Property-Rights Regimes and Natural Resources: A Conceptual Analysis." *Land Economics* 68 (3):249-262.
- Schlatter, Richard. 1951. *Private Property. The History of an Idea*. London: George Allen & Unwin.
- Schnaiberg, Allan, Nicholas S. J. Watts, and Klaus F. Zimmermann. 1986. *Distributional conflicts in environmental-resource policy*. United States: Palgrave Macmillan.
- Schotter, Andrew. 1981. *The Economic Theory of Social Institutions*. Cambridge: Cambridge University Press.
- Scitovsky, Tibor. 1976. *The joyless economy : an inquiry into human satisfaction and consumer dissatisfaction*. Oxford: Oxford University Press.
- Scott, Anthony. 1955. "The Fishery: The Objectives of Sole Ownership." *Journal of Political Economy* 63 (2):116-124. doi: 10.2307/1827047.
- Searle, John R. 1995. *The Construction of Social Reality*. New York: The Free Press.
- Searle, John R. 2010. *Making the social world: the structure of human civilization*. Oxford: Oxford University Press.
- Sen, Amartya. 1984. *Resources, values and development*. Oxford: Blackwell.
- Sened, Itai. 1997. *The Political Institution of Private Property*. Cambridge: Cambridge University Press.
- Senghaas, Dieter. 1982. *The European experience : a historical critique of development theory*. Warwickshire: Berg Publishers.
- Sennett, Richard. 1977. *The fall of public man*. 1st ed. New York: Knopf New York.
- Sieber, Sam D. 1981. *Fatal Remedies*. New York: Plenum Press.
- Siegan, Bernard H., ed. 1979. *Regulation, Economics, and the Law*. Lexington, Mass.: Lexington Books.
- Simon, Herbert A. 1957. *Models of Man. Social and Rational*. New York: John Wiley & Sons.

- Simon, Herbert A. 1986. "Rationality in Psychology and Economics." *The Journal of Business* 59 (4):209-224.
- Simpson, Alfred W. B. 1986. *A History of the Land Law*. Oxford: Clarendon Press.
- Snare, Frank. 1972. "The Concept of Property." *American Philosophical Quarterly* 9 (2):200-206.
- Soto, Hernando de. 2000. *The mystery of capital : why capitalism triumphs in the West and fails everywhere else*. New York: Basic Books.
- Stangeby, Ingunn. 1987. *Reisevaner i Norge, Prosjektrapport / Transportøkonomisk institutt*. Oslo: Transportøkonomisk institutt.
- Starr, Paul. 1982. *The Social Transformation of American Medicine: The Rise Of A Sovereign Profession And The Making Of A Vast Industry*. New York: Basic Books.
- Stigler, George J. 1989. "Two notes on the Coase theorem." *The Yale law journal* 99 (3):631-633.
- Stiglitz, Joseph E. 1985. "Information in Economic Analysis: A Perspective." *Economic Journal* 95 (Supplement):21-40.
- Stinchcombe, Arthur L. 1983. *Economic Sociology*. Orlando: Academic Press.
- Stinchcombe, Arthur L. 1997. "On the Virtues of the Old Institutionalism." *Annual Review of Sociology* 23:1-18.
- Swedberg, Richard. 1987. "Economic Sociology: Past and Present". *Current Sociology* 35 (1):1-221.
- Tawney, R. H. [1921] 1982. *The Acquisitive Society*. Brighton: Wheatsheaf.
- Taylor-Gooby, Peter. 1985. *Public Opinion, Ideology, and State Welfare*. London: Routledge Kegan & Paul.
- Taylor, Michael. 1987. *The Possibility of Cooperation*. Oslo: Norwegian University Press.
- Tietenberg, Tom. 2000. *Environmental and Natural Resource Economics. Fifth Edition*. New York: Addison-Wesley.
- Torgersen, Ulf. 1972. *Profesjonssosiologi, Scandinavian university books*. Oslo: Universitetsforlaget.
- Torp, Hege, ed. 1988. *Når godene skal deles. Fordelingsvirkninger av offentlige tiltak*. Oslo: Ad notam.
- Townsend, Peter, and Nick Davidson. 1992 [1982]. *Inequalities in Health: The Black Report and the Health Divide*. Penguin.
- Tversky, Amos, and Daniel Kahneman. 1986. "Rational Choice and the Framing of Decisions." *The Journal of Business* 59 (4):S251-S278.
- Veblen, Thorstein [1899] 1976. [*The Theory of the Leisure Class: an Economic Study of Institutions*] *Den Arbeidsfrie klasse*. Norwegian ed. Oslo: Gyldendal.
- Waldron, Jeremy. 1988. *The Right to Private Property*. Oxford: Clarendon.
- Warming, Jens. 1911. "Om grundrente af fiskegrunde (on ground rent for fishing grounds) [in Danish, for translation see Andersen, P. 1983 'On rent of fishing grounds': a translation of Jens Warming's 1911 article, with an introduction, History of political economy Vol. 15(3)]." *Nationaløkonomisk Tidsskrift*:499-505
- WCED. 1987. *Our Common Future*. Oxford: Oxford University Press.
- Weale, Albert. 1985. "Why Are We Waiting? the Problem of Unresponsiveness in the Public Social Services." In *The Future of Welfare*, edited by Rudolf Klein and Michael O'Higgins, 150-165. Oxford: Blackwell.
- Whitehead, Margaret, Peter Townsend, Douglas Black, and Nick Davidson. 1988. *Inequalities in health : the black report : the health divide*. London: Penguin Books.
- Williamson, Oliver. 1975. *Markets and Hierarchies: analysis and impacts of antitrust implications*. New York: The Free Press.

Reading notes on property rights and institutions

- Williamson, Oliver. 1981. "The Economics of Organizations: The Transaction Cost Approach." *American Journal of Sociology* 87 (3):548-577.
- Williamson, Oliver E. 1996. *The Mechanisms of Governance*. New York: Oxford University Press.
- Wirth, Louis. 1938. "Urbanism As A Way of Life." *American Journal of Sociology* 44 (1):1-24.
- Øvrelid, Ragnhild. 1984. *Rettsikkerhet eller demokrati?* Oslo: Universitetsforlaget. Dr. Philos., Instituttet for sosiologi, Universitetet i Oslo, 1983.