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VARIETIES OF PROPERTY RIGHTS TO NATURE:

Some Observations on Landholding and Resource Ownership in Norway and England¹

Good resource governance is becoming increasingly difficult. As we learn more about policy actions and their long term and short term consequences, about their unintended consequences and interaction effects, the goal of sustainable resource governance seems farther away than ever.

The problem is compounded by the pace of social change. The decision parameters are constantly changing. Since Carson's wakening cry of the «Silent Spring» a rapidly growing number of scientists have voiced concern about the long term viability of our usage of nature. From a somewhat different angle affluent urban populations have voiced new concerns and emphasized new values in their relations to forest resources and wildlife in their countryside. This has led societies around the world to attempt to formulate or develop rights and duties of citizens and corporations towards aspects of nature which historically have been unknown or uninteresting. These range from the genetic codes of the micro-organisms to the public good of a well-tended cultural landscape. Declining biodiversity from species extinction and genetic monocultures, ecosystem stability, and landscape conservation represents new challenges for collective choice and political action.

At the same time as new ways of perceiving rights emerge, the ancient rights and duties developed to regulate usage of and distribute the benefits of known goods such as arable land, wood, pasture, and wild game clearly affect the new concerns. The new institutions being developed need to take account of old ones. They need to be consciously designed to correct for the impact of, and to incorporate interactions with, old institutions. This requires detailed information on how the old institutions work before designing the new ones.

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The present paper will review some of the theoretical approaches to defining property rights in land² and renewable resources, and compare them to legal techniques used in defining and allocating rights and duties to renewable natural resources in Norway and England³. The discussion will focus on resources not owned in fee simple by individual persons. A key question is how rights to renewable resources located in uninhabited lands are conceived and enacted.

Perspectives on systems of property rights

Devlin and Grafton (1998) recognize two paradigms in the studies of how to mitigate environmental problems: the private property rights paradigm and the public regulation paradigm. Yandle (1997) adds a third: the common law approach. All approaches are in use and all may contribute towards a solution of the problems. But more needs to be known of how they work and interact in practice.

If property rights are the rights defining the legitimate appropriation of a stream of goods, we are led to ask:

- who are the actors entitled to appropriate?
- what are the goods the actors appropriate?
- how do the actors go about appropriating?
- what are the actors allowed to do with the goods appropriated?

Types of actors

A first approximation to the question of “who”, is the distinction between individuals, various types of collectives, and the state. This distinction is behind the classification of property rights into private, common, and state property rights regimes which further have been associated with private goods, common pool goods and public goods.

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

² I will talk of property rights also in the cases where tenure will be the technically correct term. The usage of tenure is based on the distinction between dominium directum and dominium utile. The Crown held the rights of the dominium directum, the dominion of the soil. The tenant the rights to the dominium utile, the possessory title, also called seisin (Black’s Law Dictionary (Black 1990)).

³ Property rights to land and renewable resources are to some unknown degree different in Scotland, Wales and Northern Ireland.

This seemingly one-to-one correspondence of type of actor, type of good and property rights regime is neat. But how close is it to the empirical reality of property rights? It is not close at all. 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 regimes⁴.

Types of Goods

The classification of goods into private, common pool, and public is often supplemented by the category «club good». A club good is characterised by non-rivalry in consumption (non-subtractable) and excludability from benefit. In our focus here we will be dealing with all types. The goods inherent in land and renewable resources are of all types.

Table 1
Typology of goods

resource is	appropriators are:	
	excludable	non-excludable
subtractable	PRIVATE	COMMON POOL
non-subtractable	CLUB	PUBLIC

Source: adapted from Ostrom and Ostrom (1977).

I have argued elsewhere 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)⁵.

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

⁴ 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. In the translation of legal concepts later on I will rely on Black's Law Dictionary, Sixth edition.

⁵ Thus I disagree with McKean's (2000) 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.

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.

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

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 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.

Types of property rights

Private Property Rights

It is usually taken for granted that private property rights include all the claim-rights, privileges, powers and immunities⁶ recognized by (mature)

⁶ 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 as seen from the owners position:

	<u>THE OWNER/ NON-OWNER RELATION</u>		<u>ITS NEGATION</u>	
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

legal systems (Honoré 1961). 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 trade⁷. 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 and applying to a good only partly or conditionally excludable, may give rise to a valuable stream of goods, some of which may be alienable. And in between the alienable and inalienable there are all possible variations of the conditionally alienable. These 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.

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

Commons (1924) takes the discussion further. He clarifies the meaning of the categories outside the strict 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 Hohfelds «jural opposite» (negation) relation applies if interpreted in the meaning of a limit on the owner/ non-owner relation.

⁷ In economics the focus on exclusion and alienation is inherent 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:

1. exclusivity – all benefits and costs accrue to the owner,
2. transferability – all property rights should be transferable through a voluntary exchange, and
3. enforceability – property rights should be secure from seizure or encroachments by non-owners.

But the importance of the allocation of property rights has not always been acknowledged. Coase (1960) argue 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. This result was labelled the «Coase Theorem» by Stiegler (1989) and many economists seem to stop reading at that point. However, Coase recognized 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. Recognizing 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.

managed by the wise and well intentioned state bureaucrats for the greatest good of the greatest number of people. By others it is focused on the inherent difficulties in designing rules to do this even in the best of circumstances, and 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.

Problems of collective action

Common property rights and state property rights share the feature of vesting in collective entities, and hence they share the problems of collective action. The first order problem consists in agreeing to assigning a particular system of property rights in the first place. This problem has been studied extensively in connection with the management of open access resources (Taylor 1987, Ostrom 1990, Sandler 1992, Ostrom, Gardner, and Walker 1994). The second order problem is to devise a mechanism for monitoring, enforcing, and revising the system of property rights.

Sources of property rights

If the nature of a good does not give enough advice on what kind of property rights to define, what are the sources of property rights? In an empirical study of the rights and duties of an owner of 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.

Bundles of rights

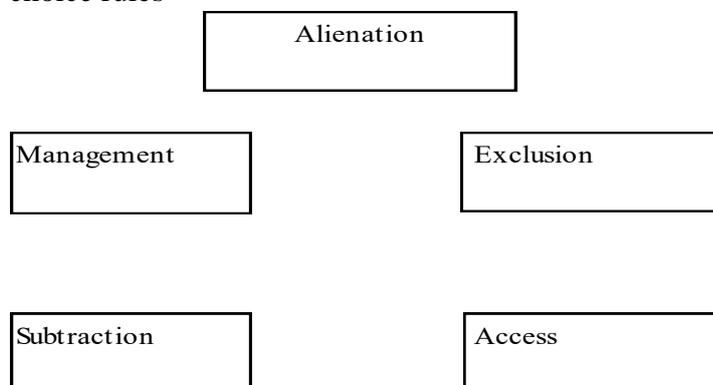
Rights seldom come one by one. Usually they are defined generally and will be thought of as bundles in the sense that the general description of them will allow for some kind of specification into «elementary» rights. The rules of specification, however, may vary. This leads to a conception of different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

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). 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 2).

The definition of «owner» in table 1 corresponds to the view holding that only right of alienation and exclusion will constitute «real» private property. Is this in fact the preferred way for legal systems to define owners? To what extent does the law prohibit, allow or proscribe some way of breaking up this hierarchy?

Figure 1 Hierarchy of rights

Collective choice rules



Operational choice rules

Source: Schlager and Ostrom (1992)

The bundles of rights defined by table 2 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 some kind of cross-cultural standard of property rights in the social science studies of property rights systems.

Table 2

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

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

Source: Schlager and Ostrom (1992)

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 two other ways of specification of rights to resources. One is the specification of the resources to which the rights apply as illustrated by the case of Norway below. The other is the specification of rights developed in the trust institution. If the hierarchical specification in table 2 is called action 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.

Trust ownership

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 2. In a trust the owner according to law and equity has a package of rights put together differently from the hierarchical system of table 2 (see table 3). 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»⁸. The 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 for Places of Historical Interest and National Beauty» in England.

Table 3
Complementary bundles of rights as defined by the trust institution.

	Trustee	Cestui que trust (beneficial use)	Manager (managerial use)	
X_1 =Access	$\Delta_1 X_1$	$\Delta_2 X_1$	$\Delta_3 X_1$	$\Sigma_i \Delta_i X_1 = X_1$
X_2 =Subtraction	$\Delta_1 X_2$	$\Delta_2 X_2$	$\Delta_3 X_2$	$\Sigma_i \Delta_i X_2 = X_2$
X_3 =Management	$\Delta_1 X_3$	$\Delta_2 X_3$	$\Delta_3 X_3$	$\Sigma_i \Delta_i X_3 = X_3$
X_4 =Exclusion	$\Delta_1 X_4$	$\Delta_2 X_4$	$\Delta_3 X_4$	$\Sigma_i \Delta_i X_4 = X_4$
X_5 =Alienation	X_5			

Again one can ask about how legislation in different countries recognizes the various rights and duties of ownership and which combinations are allowed. To what degree do rights and duties come in fixed bundles, with or without specification, and to what degree can they be specified and distributed to different actors? And how do the allowed bundles go together in relation to the various kinds of resources?

Given the dependence on political systems, it will be interesting to investigate empirically how property rights are defined and how they are distributed. This is no small task. To make it more manageable it is here limited to property rights to renewable resources (timber, pasture, wildlife, fish, etc.) and the ground on which these are found. Also, all that which is located below the ground is excluded. The areas of interest will be called «uncultivated or uninhabited lands» and will include what sometimes and in some contexts are called “rough lands”, “wilderness”, “mountains”,

⁸ For technical terms it is referred to Black’s Law Dictionary; Black (1990).

“forests”, “woodland” etc.⁹ It is further limited to Norway and England, and the investigation will be limited to legal techniques used in assigning property rights. The question of distribution has to be dealt with later. The choice of Norway is based purely on accessibility. It is the case I know best. And in order to find the technical terms to describe the Norwegian case I had to learn about land law in England.

Norway

The most ancient distinction of property in Norway is probably the distinction between the private holding of the family (the infields of the farm) and the rest of the land (the uncultivated lands) used in common with the other households in the community. In most of southern Norway the more productive forest land and pastures have, through a historical process, become extensions of single private farms, or groups of farms (the rights being held in common and inalienably attached to the farms), or it has become the resources of business corporations. The bulk of the more remote of the uncultivated lands in Norway, the mountains and remote forests and pastures, are defined as some form of state property called state commons.

For the uncultivated lands Norwegian jurisprudence have traditionally divided resources into the following categories:

timber,

fuelwood,

pasture¹⁰,

wildlife (with further distinctions of big game and small game),

- freshwater fisheries (with further distinctions of anadrome fish (salmon and brown trout) and other fresh water fish),
- lakes and streams, and
- ground and remainder.

The categories appear in the law code and the owner has different rights and duties in respect of the particular resource (see Table 4). The rights to

⁹ The proper designation of the type of lands we are interested in is unclear. The main interest is forest, but in this case it seems prudent to include all kinds of lands (such as bare mountains and marshes) outside the urban and agricultural areas. The CLAUDE (Co-ordinating land use and land cover change data and analysis in Europe) newsletter uses «semi-natural and natural areas» in discussing land cover changes in these lands (Note 2 1998).

¹⁰ The right to gather fodder (cutting grass, collecting moss and leaves etc.) have been important, but are not explicitly dealt with in the acts on commons. However, such rights are mentioned in the act on land consolidation (Act of December 21 1979) §36.

utilise these resources can be held by two types of entities: legal persons and cadastral units.

The major categories of rights holders recognised by the law are

- the state,
- municipalities (primary («kommune») and regional («fylke») municipalities),
- Statskog SF¹¹,
- citizens and other legal persons,
- the Saami,
- farmers, and
- farms¹².

The state, the regional governments and Statskog have clearly different rights and duties in holding property for the public interest. But we should also note that they can hold ordinary private property. The interesting distinction is thus not their definition as state, municipality or government corporation, but the purpose for which they hold property.

The legal code defines four different regimes for owning land in common or jointly:

- state commons except forest resources (Act of 6 June 1975 no 31),
- forest resources in state commons (Act of 19 June 1992 no 60),
- bygd commons (Act of 19 June 1992 no 59), and
- land owned in common by farms (Act of 18 June 1965 no 6). (For details about these lands see Sevatdal (1998))

A fifth type called private commons (Act of 19 June 1992 no 61) is for all practical purposes extinct (three cases are known to exist; Berge and Haugset (2015)).

In table 4 detailed characteristics of the rights to the resources of the bygd commons are outlined.

¹¹ Statskog SF is a corporation 100% owned by the state and possess among other things title to the ground in all state commons. It is charged with the duty of utilising the resources in the state commons and other state lands profitably. (see <<http://www.statskog.no/English.htm>>)

¹² To label the farm as a type of «owner» is not conforming to current legal terminology in Norway or elsewhere as far as I know. As long as the rights are inalienably attached to the farm they are considered to be part of the estate held by the farmer. However, for the analytical purposes here it has seemed useful to introduce the distinction between the farmer and the farm since the legislation uses the distinction systematically for different types of resources.

Table 4
Resource specific property rights regimes in Norwegian bygd commons

	ground and remainder	pasture, timber, and fuel wood	fishing and hunting of small game except beaver	hunting of big game and beaver	pasture and wood for reindeer herding
Rights of common	no	yes	yes	yes	yes
Co-ownership	in common	joint	joint	joint	joint
Unit holding rights	cadastral unit	cadastral unit	registered persons	registered persons	reindeer herding unit registered in the local reindeer herding district
Use and quantity regulation	internal ("owner decision")	internal ("needs of the farm")	internal ("owner decision")	external ("publicly decided quotas")	internal ("needs of the industry")
Alienability	inalienable	inalienable	inalienable	inalienable	inalienable
Power of local choice	yes	yes	yes	yes	yes

Source: Norwegian statutory law: in particular Act of 19 June 1992 no 59 and Act of 9 June 1978 no 49

The main principle organising the system of rights and duties is the ownership of the ground. If nothing is said in statutory law or established by custom the owner of the ground also owns other resources attached to the ground or flowing over it (e.g. wildlife, water, and fish). But for the uninhabited lands there are old usages establishing rights of common. These rights were made statutory in the Royal law code of Magnus Lawmender of 1274 (Taranger [1274] 1915), last revised in 1992. Today they are known as state commons. New types of commons were enacted in 1857 (bygd commons and private commons), and in 1997 a government commission proposed legislation of a new type of commons tailored to the Saami communities in northern Norway (NOU 1997, Austenå 1998)¹³ Except for private lands owned individually and lands owned in common by farms, the rest of the uncultivated lands in Norway are lands where the owner of the ground and the owner of other resources may be different.

A first important observation is that for different types of resources there are different rules regulating who can appropriate the good, how

¹³ Also see Act of 17 June 2005 no 85 [LOV 2005-06-17 nr 85 _ Lov om rettsforhold og forvaltning av grunn og naturressurser i Finnmark fylke (finnmarksloven)].

regulations of use come about, and the manner of transfer to any successors (table 4). This is here called resource specific property rights. In addition to the differences listed in table 4 there are regulations of the means they are allowed to employ (technology). Some rights and duties are conditional on residence requirements. Those living closer to a resource are given more extensive rights than those living further away.

A second interesting observation is that many of the important rights of common run inalienably with the land, the farm. The stipulation that farms may hold rights is embedded in the legal code even though farms are not recognized as legal actors. A resource, such as pasture, held by a farm is in general inalienable from the farm where it is considered to be necessary for the viability of the farm seen as an economic enterprise. Two principles used in stinting of the usage of the commons are closely related to this. One is to limit the rights of timber to the timber needed on the farm (sale of timber taken in the commons is illegal). The other is to limit the number of livestock on pasture to the number fed on the farm during the winter (beasts «levant et couchant»).

But even the detailed texts of the various acts on rights to resources in uncultivated lands are not enough to get a clear picture of a property rights regime. In addition to these we need to know how public legislation (regulations) affects the scope of the rights. Rights in forests, wildlife and fish are amended by general rules on application of technology, by limiting time of harvesting, by ruling on which species may be harvested, and by setting aside particular areas with more restrictions than the surrounding areas (protected areas). These rules apply regardless of whom the owner is or other details in the regime.

Type of rights-holder and alienability

When ground-owner and user (or owner) of a specific resource are different persons the relation can be organised in several ways. In Norway the main distinctions are

- the right of usage is attached to a particular property (a cadastral unit such as a farm), or
- the right of usage goes with a particular person or household;

There is also a distinction between

- rights of usage inalienably attached to either the land or a person, and
- rights of usage which are tradable in a market.

However, between the inalienable and the alienable there are rules of renting land and resources. Farmland, timberland and pasture cannot be rented for more than 10 years. Farmland is not unconditionally alienable in Norway. Permission is required both from municipal authorities and from possible successors as these are defined in the law of allodial rights.

Rights running with the land are either rights of common or land owned in common. There is clearly less alienability of such rights than for rights held by individual persons. Only the personally held right of access to the uncultivated lands cannot be alienated. But on the other hand, only the ground is completely alienable, and then only conditional on permission both by successors and public authorities.

Table 5
Links between Rights of Harvesting Resource and Resource Holder

	Rights vest		
Rights vest in	inalienable	alienable for a maximum of 10 years	alienable on conditions
land¹⁴	timber, fuelwood, pasture, ground	small game, big game, fish,	
person	all men's rights	timber, fuelwood, pasture, small game, big game, fish,	ground

Ownership of the ground

The person holding the best title to the ground is called the landowner. But this does not imply more than a right to some kind of tax or ground rent. Timber trees, fuelwood, pasture, wild game, and fish may all in principle have different owners. The «remainder» which goes with the ground, is more important. Any new uses of the land, not conflicting with established uses, will fall to the ground owner. And if conflicts with established uses occur, these may sometimes be bought off.

¹⁴ In this case the terminology may be confusing. Rights vesting in land will here mean that the cadastral unit is seen as a «subject» capable of holding rights like we are used to see a legal person do. For servitudes of this kind are in Norwegian often called «real-servitutt» (real servitudes).

But today we begin to be concerned with the part of the «remainder» which so far has seemed without (economic) value or even have not been perceived at all (low level pollution, genetic information). At the outset the legal system would consider it to be the property of the landowner. But for instance the fate of wildlife other than game has been uninteresting to the landowner. The water quality of lakes and rivers has been a concern as far as it affected the life and quality of the fish, but in general the concern has not been framed in terms of property rights.

The dominant approach to these new aspects of nature has in Norway been public regulation. Acts on wildlife and on environmental pollution have set standards which everybody has to follow. One can see this as the negation of property rights according to Hohfeld's paradigm. There are only duties and liabilities for everybody, no claim-rights, no privileges, no powers, and no immunities. The public regulations are a layer of duties and liabilities put on top of existing property rights. Presumably their efficiency to some extent will depend on how they interact with these.

Conclusions on Norway

Ownership of the ground has during several centuries been growing in importance for the organised usage of various kinds of resources. In the land consolidations during the last century one repeatedly encountered situations where the resources of an area was subdivided in a way that for example gave the pasture to A, the pine timber to B, the deciduous trees to C while the fuel wood, fishing, and hunting were held in common by the three. Nothing was said about the ground. The way this has been interpreted by courts in our century is to see the three persons as owning as much of the ground as the individually owned resources needed (see Austenå (1965)). In the absence of other evidence, no one in particular is to be considered the owner of the ground before others (but there was a long debate and many cases of inequitable divisions before this view emerged).

The comparative lack of interest in the ground itself in the customary law of Norway is understandable. There was no use for the ground itself. The important goods were the pasture, the timber and the wild game.

In feudal society the ground itself became an organising principle. It became a symbol of the lord's control of the ground, his property rights in the land (the dominium directum) as distinct from the use and profit from the soil (dominium utile). The kings of the first modern states (Sicily, Normandy and England; see Berman (1983)) claimed property rights in

the ground of their countries. Thus ground ownership was at the core of the formation of modern states. A contemporary state could have used the dominium directum thesis of the Crown as a legitimation of public regulations. But for this it is no longer needed.

Its current importance is probably due to its inclusion in the property rights theories gaining political power in the 17th and 18th century. The most profitable way of organising property rights was believed to be to join the ground and all the resources within an area in the same estate, the dominium plenum. This was thought to be the ideal situation for economic development. From this theory came the many arguments for enclosure which was vigorously pursued both by Denmark-Norway, and England from the 18th century (but particularly England who started much earlier). In Norway not much happened until the middle of the 19th century.

Thus the interesting things about Norway are first the continuous existence of extensive areas owned in common, basically governed by the same legislation since the 12th century. The enclosure policies did not get going until it was too late. The second interesting thing is the way rights of common and landownership has been codified and included in a system of land ownership by the use of ground ownership as an organising principle.

England

The legal techniques available in England seems to encompass all those found in Norway and then some more. Particularly the trust institution should be mentioned.

Historically the same distinctions as those used in Norway are found.¹⁵ The rules about pasture and fuelwood are more detailed and more varied, probably signifying that it was scarcer. The complicated divisions of property rights are illustrated by Rackham (1989) in his investigation of the history of the Hatfield Forest. Around 1550 the King gave all his interests in Hatfield Forest to Lord Rich. Part of the Forest was already owned by the Barrington family. In 1592 the Rich family sold their interests in it to the Morleys of Great Hallingbury. In Rackham's words:

«The Forest had been the Crown's, and the manor someone else's, for much of the Middle Ages, and this had led to disputes; but the new separation was different. Lord Morley had bought not only the Forestal rights (by now reduced to little more than the rights to keep deer) but also the soil of the whole Forest and the trees in the western two thirds. Barrington already had

¹⁵

For detailed documentation on the 18th century see Neeson (1993).

the trees (but not the soil) of the north eastern third and the right to pasture animals throughout the Forest; he now bought the manorial jurisdiction over the whole Forest, including the right to hold courts and to fine offenders (including Lord Morley) against the by-laws. As lord of the manor he now had to deal, not with distant and complaisant Royal Forest authorities, but with a resident owner of the Forest eager to enforce his claims. There was plenty of room for the two lords to dispute which rights each had acquired, and for high-handed commoners to play off one lord against the other.» (Rackham 1989, 97).

The separation of ground from the rest of the resources was clearly important. The one with title to the ground was the landowner. For a non-historian it is startling to observe that one could buy «the manorial jurisdiction over the whole Forest». But reading Bloch ([1940] 1961) account of the fragmentation of social power (military, political and economic) during the feudal ages one should not be surprised. Instead we here see one source of the local and regional variation of property rights: the local or manorial judicial powers to define and enforce rights and duties in relation to local resources.

Neeson (1993) in her account of 18th century English rural society extends the picture of a property rights system with elaborate distinctions for those resources that mattered, and where most of it, also fractions of pasture for one animal, could be rented and sometimes sold. But limitations on alienability are ubiquitous. Pasture was usually inalienable. Where pasture was of ancient origin, it was defined as a profit-à-prendre¹⁶ appendant (see Table 6). Its attachment to the land (or rather the cottage) seems to be just as important here as it is for the rights of common in Norway attached to the farm. More recent rights of pasture created by contract were called profits appurtenant. Depending on the phrasing of the contract some of them became inalienable. If the contract defined the rights in terms of beasts «levant et couchant» they could not be separated from the cottage. But if it was defined as a specific number of beasts the rights were alienable. Once they were severed from the cottage they became rights of common in gross. (Neeson 1993, 82-83).

Even more varied and ingenious were the ways in which grazing on the commons were stinted. The commoners were very sensitive to overstocking and devised through the manorial court by-laws to guard against it. Time frames for grazing, area accessible for grazing, prohibition of agistment of out-of-parish stock, and number of beasts

¹⁶ Rights of common is a type of profit-à-prendre, now only called profits. More on this in Berge (1998).

allowed to graze were variables used in a constantly changing configuration. New by-laws were in many manors promulgated twice a year.

One of the strongest arguments for enclosure was overstocking. (Neeson 1993, 86) observes «The threat to common pasture came less from the clearly defined rights of cottagers than from the larger flocks and herds of richer men.»

Table 6
Ways of holding Profits-à-prendre (rights of common) in English Land Law

	Rights vest	
Rights vest in	inalienable	alienable
land	appendant	appurtenant
person		in gross

Source: Berge (1998, 125)

Conclusions on England

One interesting question about England is the degree to which the historical possibilities for defining property rights survive. Technically I think they do. But after enclosure was completed the particular distinctions of various resources were not needed. However, the legal techniques developed remained. And these became important for the kind of capitalism that developed in England.

Macfarlane (1998, 112), citing Stein and Shand (1974), sees the English common law tradition of treating bundles of rights rather than the total dominion of the thing (as in the Roman law tradition) as being more open to the developments of new rights necessary for capitalist development. The most sophisticated expression of this may be the trust institution (see above). In Canada the trust institution is used as baseline for developing new forms of forest management in something they call an «eco-forestry land stewardship trust model» (Branighen 1997).

In addition to this I would suggest two other aspects of English law as important: the courts of equity, without which the trust institution could not have been developed, and the strong tradition for developing customary law into common law. Neeson's (1993) account of how the manorial courts were used to regulate and enforce usage of property rights gives a fascinating testimony to the versatility of the customary law

tradition. It created variety and tailored usage to local conditions. (Berman 1983, 325) observes that in the medieval society «..., law-making itself was regarded as a process of deliberation and discovery. Laws were considered to be either true or false, either just or unjust, and therefore the making and administering of them were not sharply distinguished from their application in case of dispute». The common law approach to legislation is a continuation of this tradition.

Comparing England and Norway: some preliminary conclusions

The trust institution developed in English jurisprudence out of the medieval customary law as amended by case law and common law¹⁷. From Simpson's (1986) survey of the «The History of the Land Law», and Neeson's (1993) study of «Commoners: Common Right, Enclosure and Social Change in England, 1700-1820» the situation in England in medieval and early modern time until enclosure in some respects was remarkably similar to the situation in Norway far into last century. Two similarities are of particular interest here: the practice of distributing rights to specific resources rather than a piece of land. And the practice of sharing management, or perhaps it could be called a form of co-management.

Distributed rights, co-management and «viability bundles» in medieval property rights systems

The similarities between England and Norway before enclosure¹⁸ are notable particularly in the widespread distribution of rights to specific resources to different interested parties. While one farmer could hold rights to pasture another could hold the right to the timber trees while both could have right to fuelwood. Resources useful to the farms as economic enterprises were the main concern¹⁹. Ownership of the ground upon which these resources were located was never a big issue. The importance of the ground as a repository for all resources not specified (and already distributed) elsewhere, became apparent as society started to change more

¹⁷ Its origin is traced to the effort by the more wealthy to evade the statute of uses from 1536 (see Simpson (1986, 199).

¹⁸ In Norway enclosure had barely started when England's last two acts enacting enclosure of forests passed parliament in 1857. The first act on land consolidation in Norway is from 1821. But only with a second revised act from 1857 did the consolidated area begin to increase

¹⁹ Thus use rights to sufficient acreage of infields and outfields as well as rights to fuelwood and timber were a concern of both the individual farmer and the governing body of the society. The concern with the viability of the farm enterprise also appears in rules about servitudes said to be «appendant» (such as inalienable rights of common to pasture). In settlements a main concern was to keep the land undivided on one person's hand and to give younger generations bargaining strength in relation to the single owner. The concerns and impacts of this are closely parallel to the «allodial» rights in Norway (åsetes- og odelsretten).

rapidly. Basically the ground came to be seen as being held by the lord of the manor. Again this happened much earlier in England than in Norway.

The shared management arises particularly (or is most easily seen) in the management of resources on land held in common. The variety of customary ways local communities were governing the access to and removal of goods from common land was partly the reason for the effort of King Henry II of England to establish «common law». Local management of resource use was one feature of this²⁰. In Norway local management and its relation to centrally promulgated rulings are considerably less studied and documented.²¹ The co-management did not only encompass a division of power between the Crown and the local community but included also at times division of rights in the same resource, particularly timber²². In Norway the distribution between Crown and commoners of rights in timber was enacted in 1687 when the commoner's rights to timber and fuelwood were stinted to the amount needed for the farm. If there were more than the commoners needed, the remainder belonged to the Crown. In other words: a commoner could not take timber from the commons and sell it.

For the purposes here we can conclude with an old tradition of co-management of resources on common land and an equally old tradition of distributed rights to specific resources. One important limitation on the distribution of rights to specific resources was a concern with the viability of the farm seen as an economic enterprise. Thus each farm became a specific bundle of rights (an estate) with only one feature in common: the viability as an economic enterprise.

In England enclosure mostly removed common land from agriculture and by that the importance of distributed rights. In Norway land consolidation never was able to consolidate enough of the outfields and mountain pastures to remove its importance.

²⁰ The way Henry II went about this became a major contribution to the Western Legal Revolution (see Berman 1983:438-459). He succeeded «by creating a royal judiciary that operated under the control of a royal chancery but also by providing a more rational law and by enlisting **community participation** in administering it.» (Berman (1983, 445-446), my emphasis). Use of common land would seem to be an important part of this co-management of the various resources (Neeson 1993, 110-157).

²¹ For a recent contribution see Tretvik (2000).

²² In Magnus Lagabøters Law code of 1274 it is explained how to divide a whale between the Crown and the local community.

I will suggest that this is a third model of bundling property rights supplementing the hierarchical management bundles and the trust bundles.

Table 7

Distributed resource specific use rights and «viability-bundles»

	Farm A	Farm B	Farm C	Co-owner and/or co-manager *Crown *Lord of the manor
farm houses	x	x	x	
infields	ground use-rights	ground use-rights	use-rights	ground remainder
outfields	ground use-rights	use-rights	use-rights	ground remainder
mountain pastures	ground use rights	use rights		ground remainder
fuelwood	x		x	
other resource		x		
timber deciduous		(x)		(x)
coniferous	(x)		(x)	(x)

So far we have presented the three models

- Action bundles of management rights
- The trust (or «utility») bundles of management rights, and
- Viability bundles of resource use rights

Why is ownership of the ground so important?

The observations of the importance of the ownership to the ground and the way it is used to structure the bundles of rights suggest two very different modes of development in property right to land and renewable resources. One is driven mostly by legal-academic thinking since the (re) introduction of Roman law in the law school curricula in the 12th century, but also by the demand from powerful persons. The other development is driven by the practical interests of the common-law approach to conflict resolution.

In both in Norway and England legal development seems to have led to a theory of landholding where ownership of the ground automatically implies ownership of all resources attached to the ground or flowing across (unless otherwise specified in contracts between owner and some

tenant). The ownership position is assumed to have all the rights and duties as specified in the full hierarchical management bundle of rights. This unity of landholding and resources and the full power of actions associated with it give a simple and powerful model of the resources held by independent and self-sufficient individuals and citizens.

Students of modern society often note a trend they call individualisation. Without going into the many aspects of this process it can be noted that the expanding application of the «Roman» action model of land holding obviously is part of it. The model both nourishes it and is strengthened by its cultural and academic standing. The action model is for example taken for granted in the standard definition of ownership and property in neo-classical economic theory (see note 7 above). Its hegemonic standing shows up, for instance in the rather automatic inclusion of it in policy recommendations for reforms of the East European economies. It's rather contingent and culture specific nature is not considered. Therefore the existence of alternative models both in England and Norway should be of interest. In the problems of collective action on economic development and resource usage these may pose different both problems and advantages.

In contemporary English jurisprudence we find the «trust» model of landholding. In relation to collective action on resource usage this model may not be much different from the action model. But it has proved very versatile in its adaptations from, on the one hand, the capitalist concerns about organising resource ownership and distributing rents, to on the other hand, collective action based on public concerns about cultural heritage or protection of nature.

In Norway the Roman action model is the standard theory. But in addition we find what we may call a «Germanic» model of resource ownership. In this model resources are distributed in viability bundles. In medieval times rights and duties were negotiated locally, limited and sometimes mediated by the King. Today they are specified in legislation based on the customary rules. Both history and current practice would suggest that this model to a larger degree than the Roman model is furthering collective action at the local level.

It might be an interesting hypothesis to investigate whether more opportunities for collective action at the local level may weaken the power of the state. Some states would seem to act as if this was true.

Looking beyond England and Norway

Without trying to offer much in the way of evidence it will be suggested that around in Europe, and probably elsewhere as well, there is a strong general tendency to organise ownership into the «Roman» action model of private property. In England and the Scandinavian countries great efforts have been expended on the enclosure process to take apart the bundle of older rights and put together a new one where ownership of the ground goes together with ownership of all that is attached to or flows over the ground. No country has succeeded completely. Norway is perhaps the one country with least success. England has in one way succeeded completely. But England has at the same time immediately moved beyond this total «unity» of rights by applying the trust institution to the management of land according to new concerns about cultural landscapes and the sustainability of ecosystems.

Another striking feature in contrast to the enclosure movement is the creation of new commons as well as public trusts. In 1857 the last enactments on «Forest» enclosure occurred in England. The same year Norway enacted new types of commons as well as reaffirmed the old commons. A few years later Sweden and Finland were creating new forest commons and in 1976 Portugal made an effort to recreate the old village commons called baldios. England did not try to recreate any of their old commons. But with the legal techniques developed they could create something new, the public trust, owning and managing land, not in common, but for the benefit of the new urban commoners.

Finland (Åland Islands), Denmark (Faeroes, and Greenland), Norway (Svalbard) and of course UK and Switzerland, have regional legislation (in the sense of geographically separate legal systems). The regional variations within countries can of course be explained as remnants of our feudal past. But differences between countries are more difficult. Somewhat surprisingly they do not seem to even merit an explanation: on the one hand they are -presumably- «natural» consequences of the cultural differences and the autonomy of the nation state, or on the other hand, they are mere political distortions of the ideal situation of complete private property. This lack of a comparative perspective on the various ways we use and enjoy nature is to me in itself a puzzle.

What little evidence I have been able to survey do not support the disappearing differences hypothesis, neither does «naturalness» of the variation among nation states seem obvious. My hunch so far is that local variations in geophysical conditions, and an economic organisation

tailored to particular local resources has much to do with the stability of property rights, and hence the persistence of their differences. Property rights are kept unchanged because the major political players find them useful as they are (North 1990).

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