

The Tenth Biennial Conference of the International
Association for the Study of Common Property (IASCP)

**The Commons in an Age of Global Transition:
Challenges, Risks and Opportunities**

Oaxaca, México

**The historical evolution of commons in Flanders:
results from a microstudy (18th-19th century)**

**Panel Session 13, Friday August 13 2004, 10:00-11:30
TEO5. Historical analysis of Socio-ecological systems**

**M. De Moor-Ghent University (Belgium)
Department of Early Modern History
University of Ghent, Blandijnberg 2, B-9000 Gent
(martina.demoor@ugent.be)**

PLEASE DO NOT CITE WITHOUT PERMISSION

©2004 Martina De Moor

Figures

Figure 1: The three-dimensional approach to commons	5
Figure 2: Hypotheses on the use, management and users of commons	9
Figure 3: Map of the province of Western Flanders with the location (green areas) of the case study, the <i>Gemene and Loweiden</i>	13
Figure 4: Exploitation level of the common (used for grazing by horses, cows and pigs), 1700-1840	22
Figure 5: Evolution of the balance of accounts	24

Debating the commons

The problems accompanying –but not necessarily caused by- the common use of goods have been the object of social and scientific debates since Antiquity.¹ Commons have played a central role in the search for the optimal way in dealing with such problems. This is not surprising: until the middle of the nineteenth century the common use –mainly for agriculture- and management of land was a current practice in Europe. Common land was in most Western European countries eliminated during the 19th century "liberalisation wave" that swept through Europe.² Until then, commons had provided an important contribution to the mixed agriculture system as a whole: the cattle on the common provided fertilisation essential for the arable fields, the fuel (peat, cuttings of wood), building materials, heath and so on. With the increased external inputs (fertilisation, seeds) and the increasing specialisation and commercialisation of agriculture the necessity of the commons gradually disappeared. Notwithstanding the assumed importance of commons in history, the number of historical studies on the subject is rather limited, except for the UK –where the privatisation (enclosures) of the commons is supposed to have had far-reaching social consequences for the users. In their study, historians have mainly focussed on two aspects: the disappearance of the commons and the consequences of this for the commoners' social welfare, whereby the commoners were almost always studied as groups, not as individuals with different strategies towards the use of the commons. Researchers from the non-historical social sciences have however concentrated primarily on the effects of individual behaviour on the functioning of the common as a system of resource management and on the optimisation of management and use of common pool resources, a theme that historians have only recently discovered.³ Besides the relatively limited interest among historians for the subject as such, there was so far little interest for the methods and results of the other social sciences, although this could help "lifting" the historical research on commons above the (current) purely descriptive level. Although the metaphor of the "tragedy of the commons" refers to a historical situation and although "sustainability" –as one of the main interests of

¹ See (Aristoteles : Chap. 3)

² For an overview of the process of dissolution of commons in Europe, see (Vivier and Demélas 2003)

³ See (De Moor, Shaw-Taylor, and Warde 2002b)

social scientists- is a concept that necessitates a long-term approach, the non-historical social scientists have only since a number of years shown an increasing interest for the historical dynamics and context in which commons develop(ed) and change(d). In short: historians and other the other social scientists have clearly been following a different track, and have missed several opportunities to enrich each others work and in particular to learn from each others case studies. In this paper, I want to take a first step towards bringing both scientific parties together, hereby concentrating in the first place on a number of definition questions that currently stand in the way of the mutual exchanges of information. The terminology that is used by the different disciplines was also influenced by their different approaches. Thereafter, I will make these differences clearer by analysing and structuring the debate. Some of the issues dealt with will be considered by social scientists working on commons as common knowledge. However, the first two parts are necessary to open up the debate and to clarify the particular difficulties –that are often underestimated or even unknown by social scientists- when studying commons in the historical Europe,⁴ to explain the differences in approach between social scientists and historians and to introduce the case study that follows in part three, as an illustration of the applicability of the theoretical analysis. With this paper, I hope to enhance the mutual exchange of research results and – methods between historiography and other social sciences and to give the debate a more interdisciplinary turn.

Commons or 'goods used and managed in common' can be found in past and present. The original "historical" use of the term "commons" was however limited to the "territorial" type: land that was used in common for the harvest of hay, wood, peat that provided pasture for the cattle of the local population and other natural resources for construction and housekeeping. The large variation in physical appearance of the commons has caused a great diversity in terminology and thus hampered comparative research.⁵ The terminology has also blurred the variations in the forms of property of the commons and in the degree of autonomy which can have far-reaching influence on the management of a common. Historical commons could be managed by the users –or their elected representatives- themselves or by the local authority. The way commons were managed could differ a great deal: from a co-operative-like system (e.g. German *Genossenschaften*⁶) to a management that was mainly recruited among the local notables. On top of that a number of terms is being used for different affairs: an open field can refer to the physical openness of a field as

⁴ In the text, the description "historical commons" will be used to refer to commons in their "original" form, i.e. as they could be found until the end of the Ancien Regime (end of the 18th century)

⁵ For an overview of terms used in English, see (De Moor et al. 2002b: 261); for terms in French, see (Vivier and Demélas 2003: 327-328)

⁶ (Warde 2002a) and (Warde 2002b); see also (Brakensiek 2002) and (Brakensiek 2003; De Moor et al. 2002b: 261)

to the common character of the use of the good.⁷ The non-historical social scientists have placed the term 'commons' that originally only stood for "common land" in a larger frame. They introduced a number of terms that stressed not so much the physical appearance among them: the term "commons" today is not only used for common pasture or woodland but also for fishing land or irrigation networks used by groups. These terms are –in extenso– even used for goods as air, water and the internet, also described as 'global commons'. Among historians, the usage of the concept of has however remained mostly limited to land.⁸

We can put some order in the mass of definitions by distinguishing the three always returning aspects of the multiple term of "commons": natural resource, property regime and users (see Figure 1). The term common stands firstly for a natural resource, varying from land (common land) to water courses, fishing land and such more. This corresponds with what in general falls under the denominator of common pool resources (CPR). E. Ostrom describes 'common pool resources' as 'natural or man-made resources sufficiently large that it is costly to exclude users from obtaining subtractable-resource units'. On the basis of this definition and further literature one can assume that it takes two criteria to define a CPR: firstly, the high expenses of physical exclusion of the natural resource (excludability).⁹ The larger a territory, the more difficult it becomes to exclude others from using it. Such a territory has a lower excludability than a small, controllable territory. The expenses of the exclusion are fixed by on the one hand the size and the type of the natural limitation of the resource system and on the other hand the available technology to enclose the good (hedges, fences, ...). Secondly, the presence of 'subtractable resource-units' (subtractability). Subtractability is in the first place related to the limitations that are imposed on the users by nature and technology.¹⁰ Describing the excludability and subtractability of a good helps foreseeing the difficulties that may arise in case of common use and explains the necessity for regulation, organisation and institutionalisation of that use. Each natural resource is after all limited and can only support a limited number of users at the same moment without having these colliding with each other or decrease the yield that is available for the group. The extent to which the resource has this capacity, or also the extent to which more than one commoner can use the same resource without affecting the level of the resource is expressed through the term of subtractability.¹¹ As today, the historical commons could vary substantially in size and delimitation: from the large *markegenootschappen* in the east

⁷ (De Moor, Shaw-Taylor, and Warde 2002a: 18)

⁸ In a few exceptional cases, historians have tried the theoretical frameworks that have been developed to understand commons (such as the framework of (Ostrom 1990)) on other common property systems than land, such as water boards (see e.g. (Dolfing 2000) and (Dolfing))

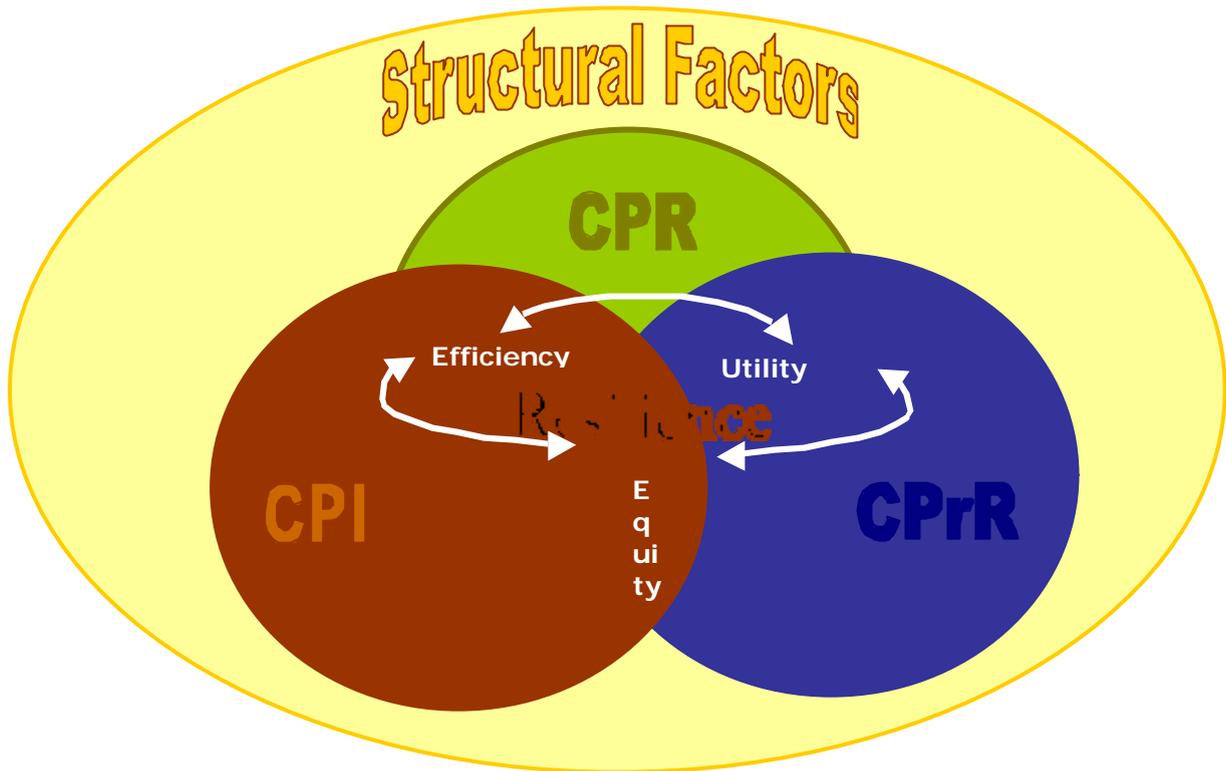
⁹ E. Ostrom in (Bromley and Feeny 1992)

¹⁰ (Oakerson 1992: 41-62)

¹¹ D.W. Bromley en D. Feeny, idem.

of the Netherlands –with rather vague physical boundaries to small commonly used meadows in Flanders. In any case, exclusion from the common had to be obtained mainly via more formal access rules (see further). In some cases the physical delimitation of the commons and was obtained by the description of a zone (in Flanders "the vrijdom") wherein one had to live in order to be qualified as a commoner.¹²

Figure 1: The three-dimensional approach to commons



A second dimension of commons we find in the property rights: a common can also be seen as a property regime. The term common property regime (CPrR) refers to a property regime “somewhere” in between private property and public property. Drawing the borders between private property and public property on the one hand and common property is on the other hand very difficult, precisely because the goods whereupon the common property rights rest show on a number of points strong resemblance with private goods and with public goods. Common goods and private goods show resemblance concerning the subtractability of the goods in question: every 'unity' of the resource that is consumed can no longer be consumed by someone else. Public goods (for instance street lighting as public good), can in most

¹² See for example the case of the Beverhoutsveld in Flanders (See (De Moor 2002) and other publication in Dutch and French:(Andries 1880) and (Errera 1891))

cases be consumed multiple times by several persons. The difference with private property is that commons can not be divided among the users, because it is physically impossible or because the expenses for subdivision of the good are so high they cannot be covered by the profits. This means that CPRs are low in divisibility. This they have in common with the pure public good, and discerns them from private property (high divisibility). Commons are however different from open-access-goods, also called *res nullius* or nobody's property, which stand for territories of which no property rights have been recognised.¹³ In case of open access there are no rules that regulate the individual use rights. Open access problems stem from unrestricted entry, whereas common property problems stem from tensions in the structure of common use. The term "property" is however hardly applicable for the Ancien Regime, where the feudal structures of society mostly resulted in a rather complex collection of different claims on the same piece of land. A common property regime should thus –at least when discussing pre-19th century developments- be considered as a bundle of rights on land (or other resources) rather than the more absolute interpretation of property that is common today.

The interaction between the first –commons as natural resources- and the second dimension –the users of the commons- necessitates a certain form of organisation. The institution that looks after that organisation -or the common pool institution (CPI)- can be considered as the third dimension of common land. Almost everywhere in the historical north-west Europe, reasonably sophisticated institutions were designed for the management of common land, that for the most part involved users as the jurors in manorial or village courts, and as monitors of the day-to-day use of the common. As such, they usually also enjoyed the power to alter management rules. These courts often, though not always, appear to have had a system of graduated fines for punishing wrongdoers, and they drew up by-laws that were approved or amended by the lord, the lord's court, the village court, or the assemblies of users. Historical examples of autonomously functioning institutions can be found among other in the Netherlands (*markegenootschappen*) or Germany (*Genossenschaften*). Next to these corporate organisations, common land could also be managed by the local political-administrative organisation. This was the case by for instance the Dutch "*gemeenten*", which were managed by the local village/municipality.¹⁴

All in all we can say that three aspects must be taken into account: the resources, the property regime and the institution. The terms common pool resource, common property

¹³ (Ford Runge 1992: 18) . See further (Ciriacy-Wantrup and Bishop 1975: 713-727)

¹⁴ For equivalent institutions elsewhere in North Western Europe see the chapters 2 to 9 in (De Moor et al. 2002b)

regime and common pool institution refer respectively to the use, the users and the management of the commons. Besides the advantage of terminological clarity, the use of these three dimensions allows us to approach the functioning of common land in a coherent and systematic way. Most importantly these terms allow us to discuss long-term evolutions - going back to the origins of commons in Middle ages- since they are sufficiently abstract to be used for all types of different commons. The combinations of these three dimensions of commons can be considered as a 'system' by which the different aspects interact with each other. In the literature on CPRs the term 'social-ecological system' (or SES) has been introduced as a result of the ecosystem-approach in the study of social systems. A social-ecological system is described as an 'integrated system of people and the natural environment'.¹⁵ 'Social' does not only refer to social differences but also to the involvement of man in the system. The approach of commons as systems offers the advantage that different areas can be studied in relation to each other and that causes of problems can be approached from different interrelated angles. Whereas social scientists have excelled in particular in studying the interaction between those dimensions (influence of use upon the resources or influence of particular forms of management on the sustainability level of the exploitation), historians have stressed the long term development of particular issues (e.g. economic value of the common or poverty level of the users). Three particular terms –that have been used in commons studies- can help us identifying the interaction between the three dimensions: utility, efficiency and equity (see case study).

Debates on commons from an interdisciplinary perspective

Concerning the contents of the debates, historians have put the emphasis almost exclusively on the dissolution of a particular type of common good, especially common land. Since the middle of the nineteenth century, common land has disappeared almost completely out of the European landscape and out of the collective memory of the Europeans. This process was accelerated by the questioning of common customs and management of goods since the mid-eighteenth century, in the particularly by the politically influential Physiocrats.¹⁶ Historians working on Great Britain –and in particular England- have focussed primarily on the social consequences of the enclosure movement, of the possible negative effects (proletarianisation) on the commoners (see for example the work of the Hammonds¹⁷ and J. Neeson¹⁸). Social scientists that started working on commons in particular from the 1970s

¹⁵ See among others <http://www.resalliance.org> (10/02/2004).

¹⁶ In the Southern Netherlands especially Maria-Theresa and Josef the Second were influenced by the Physiocratic ideas.³

¹⁷ (Hammond and Hammond 1911)

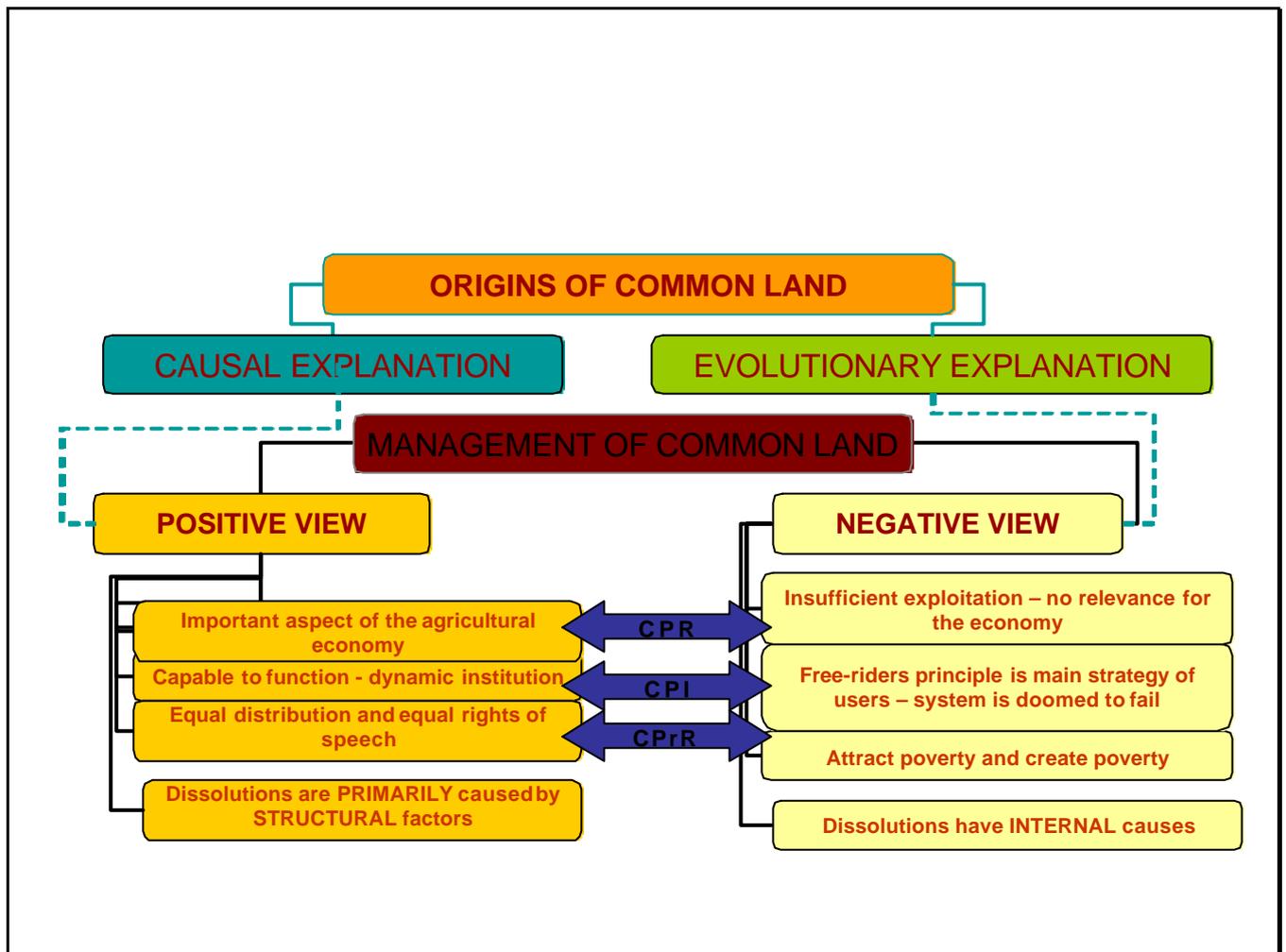
¹⁸ (Neeson 1993)

onwards were often not aware of the long-standing tradition of historians working on this particular topic. Since the start of the IASCP in 1984 a considerable number of studies have pointed out the capacities of common management regimes for natural resources. These examined in the first place the management of the CPRs, with however only limited interest for the surroundings and structural factors (such as the influence of the measures of authorities, changes in the social structure and the agricultural system). In general there is little interest for possible interactions with other social phenomena among social scientists, the stress is on the personal decisions commoners take when being confronted with a common property situation (that are often simulated in "games"). Commoners were however –as every other person in every other period of history highly influenced by their living conditions; the intensity of the participation to the common was dependent on their needs and those were determined by their own social and economic position and that of their predecessors. Commoners could follow a certain strategy but their action radius was –and still is- to a certain degree –that is also dependent on the age one lives in- limited by social structures. Historians should on the other hand be blamed for having underestimated internal forms of conflict –like free-riding- as a possible cause of dissolution. As I will illustrate with my case-study, the degree and ways of participation of the commoners, could influence the management of the common greatly.

What now is the connection between the different views and premises that in the course of history have been formed by scientists from different disciplines? And: how can we structure or map the approaches in order to stimulate the dialogue between social scientists and historians? I use two methods to structure the debate, as illustrated in a sort of "mind map" in figure 2: the conviction of the researcher over the capacities of common use systems and the different dimensions I have mentioned earlier in this paper. We can assume that all views on the different aspects of commons come down to identifying a negative or positive causal relation between the property regime and the state of the resource. The negative view assumes that the property regime has led to a deteriorated state of the resources. The positive view assumes that the property regime is a necessary consequence of the resource: it is the property regime that is adjusted to the particular type, amount and value of the available resources. In this view a common property regime can be useful or necessary. The positive view also lets space for other property regimes and does not consider the management and use in common as infallible. The negative view claims the opposite: the common property regime is precisely the cause of and can lead to an inferior good. The second method that we handle to structure the debate is the use of the earlier discussed dimensions of the commons, namely the management or the institution, the users and the use. As will become clear, opinions on each of the different dimensions of commons, are

more closely knit together than one would assume at first sight. The analytical relationship they show in this model should however not prevent us from thinking in a nuanced way about commons. The model in Figure 2 should be considered as a starting point for analysis whereby every aspect of the commons is at least considered when studying one particular part. In combination with Figure 1 the following figure should allow us to build a dynamic and holistic model to study long term development of commons.

Figure 2: Hypotheses on the use, management and users of commons



In the debate on commons as an institution there are two themes of interest: firstly, the origin of commons and secondly, their management. Concerning the origins of commons, we can distinguish two lines of explanation: the evolutionary explanation and the causal explanation. In the first explanation there is only one possible direction common property can move towards, namely private property. This goes with the conviction that common property stems

from ancient forms of "Germanic" tribal communism and evolves via clan holdings to individual property in severalty.¹⁹ When the transition of collective to individual property happened, is still not clear. Those who support this view consider common land as an archaic and inadequate system for the management of natural resources. One of the supporters of this view was the Belgian liberal (in the 19th century Belgian sense) politician Emile De Laveleye who in his substantial work 'De la propriété collective et de ses formes primitives' (1891) made an international comparison of collective property and discerned a similar evolution in different parts of the world: common 'primitive' systems always had to – and always would have to- clear the field for private property, a view that is typical for the late 19th century.²⁰ Although this view on the origins of common land is considered outmoded these days, it does implicitly continue to live in the literature and debates on other aspects of common land, as illustrated in figure 2.

A particular property regime can also be the result of a choice between several alternatives. This causal explanation shows analytical similarities to the so-called "commons dilemma". Different factors can have played a causal role. In the economic variants of the causal explanation, the value of a good is determinant for the property regime that is chosen for the management of the goods. I would like to stress here that 'value' should be interpreted in relation to other factors, in particular those factors that vary independently from the common. The reference value (the resource that is compared to the common good in order to determine its value) is determined by the market value of the good. A good is of low value because the produced goods –also in large quantities- have only a limited market value because the resource produces only little valuable goods. As long as one does not invest in the good to enhance the value of the resources it produces, the value of the common as a whole remains –from a relative perspective- low. Because of the lack of investment in the good and the possible mismanagement this can entail, the value can diminish further. In other words: the value of a good can change under the influence of the qualities of the management, and this can necessitate a change of property regime. Besides the actual market value of a good, the value of a good –and in particular common goods- can also be influenced by the importance of the resources in the local economic –in particular the agricultural- system. The extent to which an agricultural system is dependent on for example the manure that is produced by the cattle on the common, influences the value of the common. If, in case of a deficiency, it is possible to replace this good (by for example artificial fertilisers), this influences the value of the good for the local population, for the

¹⁹ See among others the jurist von Gierke, and Marx and Engels, who posited 'commons' dating back to early Germanic times

²⁰ (De Laveleye 1891)

commoners. In case the scarcity is related to a lack of a crucial part of a particular (agricultural) system ("qualitative scarcity"), it becomes more important to create a good balance between all parts of the system than creating more resource units of the scarce resource. In other words: the context wherein a resource is used is as important as the market value in order to decide upon the desirability of a common property regime.

Secondly, when the value of a good is limited, is it economically seen not interesting to invest in it as an individual. A common property regime offers a number of scale advantages concerning management and transaction costs. The managerial expenses to be made (among others fences and hedges to protect the common for improper use by others than those entitled) lower as the surface of the territory increases. In that case it is more interesting to cover these expenses by a group rather than as an individual –and then in it particularly the expenses of works as drainage and fences to divide the good among a large number of individuals.

Thirdly, the spatial variability of the yield of a territory can in a traditional agricultural system with little external inputs (artificial fertiliser, irrigation and drainage, ...) be an important incentive to chose for common property. Runge describes this argument as 'natural resource dependency'. Because the distribution of natural resources such as land or water is arbitrary in time and space, the granting of exclusive rights over a specific area, can entail the unfair distribution of resources. In comparison, common access can give fairer results.

Fourthly, Private rights and the inequality these bring along can in the end have destabilising effects. Poverty and an ad random distribution of wealth can result in a high degree of income insecurity. In a developed economy the arbitrariness of nature is much more under control. Common management (in a CPI) and possession (in a CPR) can for a dam against uncertainty by natural circumstances. Common use and management must –in this sense- be considered as a form of risk sharing or a form of insurance against bad harvests.

Fifthly, the expenses of the transition of common to private property, the so-called transformation costs, can play a role. Norberg puts that beside the limited yields of the French commons, the high expenses to privatise the good played an important role in the conservation of the commons. The social overhead necessary to attribute private property rights to goods, to define these, to make these rights transferable, and making this structure function is often invisible but can nevertheless be substantial. Imposing private law can be considerably more expensive then customary agreements. Those claiming that CPIs cause poverty have -according to Ford Runge- taken the cause for the consequence: the CPI has

not caused poverty but the poverty of the users has made them chose for a more advantageous property regime.²¹

On the basis of this dichotomy between the first –evolutionary- and the second –causal- explanation, all the other hypotheses that have been raised in the debates can be ordered. As becomes clear in the schematic overview of the debate (figure 2), researchers who are convinced commons can be managed efficiently, are –mostly- also convinced of the economic importance of the common in general and of the utility of the common for the users, hereby also stressing that the common management system was not necessarily responsible for the poverty of its users. Those convinced of the inadequacy of a common property system for the management of natural resources, mostly stress that the local economy was or is not dependent on the resources obtained from a common, that these were unimportant for the commoners, that these have even lead them into a state of destitution.

The functioning of historical commons in theory and in practice: results from a microstudy (Flanders)²²

Although the spatial variation of commons is recognised, the temporal variation of commons is often underestimated. The managers of the commons were able to adjust their management to: the changes in the local social, economic, legal and political conditions. Commons did not function in a vacuum, nor did their users. A lack of other sources than regulative ones for the analysis of the day-to-day practical management of the historical commons is an important reason for the often rather static picture of the commons' management. Most records of regulations and by-laws that have survived are –as with many historical sources- incomplete: they do not provide a set of rules sufficient to cover all of the management parameters for a system of common rights. Oral local custom played an important role in transferring some regulation from one generation to another. Moreover, regulative and other documents often are the result of an issue that needed clarification, e.g. after a dispute. Whether the repetitious reaffirmation of rules was the consequence of such disputes or simply stemmed from the preventive attitude of fear for shortage of the managers or had to do with the economic value of the resource at stake, remains unclear in most cases. Beside the fact that regulative sources are unable to reflect the day-to-day functioning of a common, they can neither give an accurate presentation of the individual choices

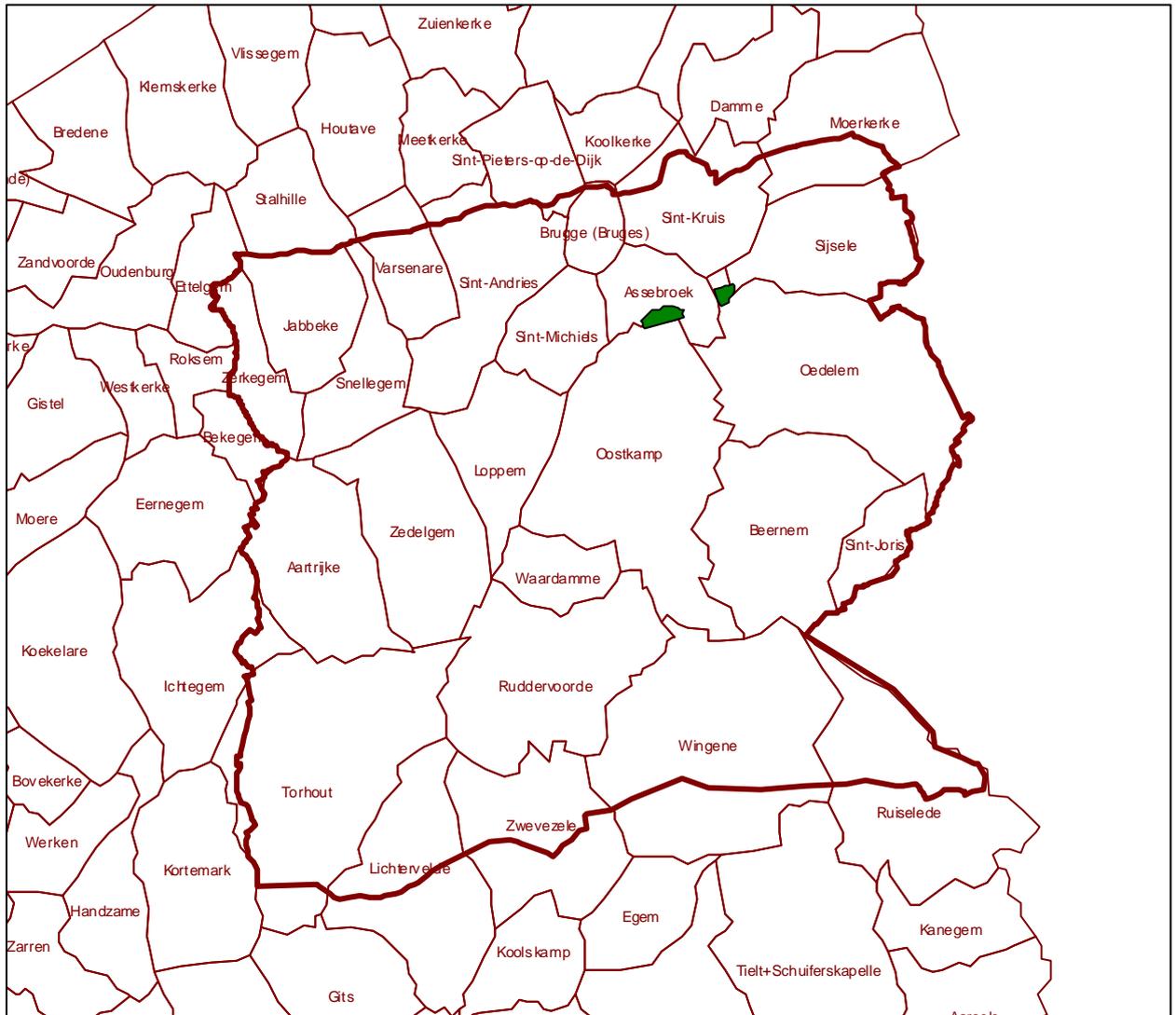
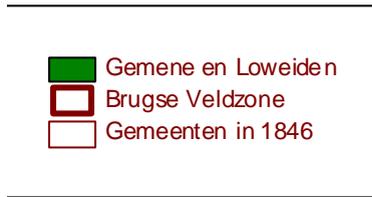
²¹ (Ford Runge 1992: 18). See also (Ciriacy-Wantrup and Bishop 1975: 713-727).

²² For all the data used in this part of the paper, I refer to my unpublished PhD, (De Moor 2003)

commoners made nor of the underlying stimuli to urge the commoners to change the existing regulation. As will be explained, commoners could decide upon their involvement in the commons' functioning (from no participation at all to becoming one of the commons' managers).

Researching the commons from the perspective of the commoner is a rather new approach in historical research on commons, mainly due to the lack of (the will to use the) adequate sources. Managing a common was a matter of balancing between the efficiency of the use – how to achieve the most sustainable exploitation level?-, the utility of the use for the commoners –how to arrange a sufficient use of the resources?- and the equity of this use – who gets how much of the resources? Only a flexible management with regular meetings and an intensive exchange of information among users and managers could deal with such a difficult task. Therefore it is –in order to understand how a common really functioned in past times- absolutely necessary to look beyond the written regulation and to dig into the daily use and management of the historical commons. However, as with nearly every historical subject, the sources to do this –accounts, reports of meetings, ...- often lack. For a particular case in Flanders an exceptional amount of data has been preserved: the "Gemene en Loweiden", a collection of meadows that form until today one of the last commons in Belgium and is situated in Western Flanders (with in the North West the North Sea), near Bruges (see green areas on map of the province of Western Flanders).

Figure 3: Map of the province of Western Flanders with the location (green areas) of the case study, the *Gemene and Loweiden*



Besides detailed information on the regulation of this common regulation by means of resolution books, the detailed book keeping for most of the 18th and 19th century and the list of entitled users since the beginning of the 16th century have been preserved. On the basis of these sources it is possible to link the regulation of commons with its effects in practice and –and this is quite exceptional for commons studies - with the social and economic background and the participation level of commoners. Before getting into detail, some

background information on this common is necessary. In order to limit the number of users - or "aanborgers" as they were called-, the use right on this common –that provided primarily grass for cattle grazing and some wood- could only be inherited, and this only by men. Women could pass on their use right to their husbands but could not claim the use of the common themselves. There are however several cases of widows who were allowed to use the common temporarily after the death of their husband. In case the woman whom the husband obtained his use-right from, died before him, the husband lost his rights. The children that sprang from the marriage could however continue to use the common, after subscription to the common. Men sometimes re-entered the common by marrying another woman from a rightful family. There is the case of Alexander Verplancke who became a commoner in the 18th century after marrying Anna who herself could pass on the right. As Alexander used the common very intensively for cattle grazing but also derived an extra income from it via wage labour for the common (digging ditches, reparations etc.), it was after Anna's early death most likely quite advantageous to remarry not just any woman but one with use rights. Although it remains unclear whether this was one of Alexander's selection criteria when he decided to marry another woman, he re-entered the common quite soon after his second marriage, as the husband of a woman again with use-rights.

Regulating pressure on the commons

The regulation discussed here was meant to limit the influence of two –rather obvious- threats and possible causes of overexploitation, significant population growth and commercialisation of goods. In literature, these two threats are not always clearly discerned from one another and the capability of human beings in the past to regulate their own behaviour is often underestimated. Commoners were however clearly aware of the distinct nature of these two threats and tried to deal with them. As will be explained, rules concerning population pressure were formulated differently from rules preventing commercialisation.

Regulating the number of users in practice

Throughout Europe, commoners tried to limit the use of the common. In most cases, access rules were set in accordance with the local sovereign, often entailing specific exceptions such as the preservation of the hunting rights for himself. Several different types of "access rules" can be discerned.²³

²³ (Warde 2003: 67-68)

- 1) A right on the common linked to property-holding, or tenancy of a particular property within a lordship, which might be a building, common arable, or both. In this case the lord of the manor actually owned the commons; disputes were resolved in his court. This form of private jurisdiction, the 'court baron', was not abolished in England until as late as 1925, although most had ceased to function long before. North-western France had a similar model.
- 2) A right on the common as a member of a village commune or municipality. The common rights were owned by the collectivity of the 'citizens' or members of the commune, who exercised these rights as a group rather than as an association of individuals. They had rights to common resources within the jurisdictional area of the local village. The common land (usually the common waste) was often actually owned by the institution of the village although such bodies were still almost always juridically subject to a lordship, and later, the state. The village court made bye-laws and acted as the lowest tier of the public court system. This model was frequently found in some form in Germany, parts of (Dutch and Flemish) Brabant, Alsace and Béarn. These commons were transformed into the public property of the local municipality as a result of the French Revolution.
- 3) A right on the common as a member of a co-operative or an association of individuals with rights to a material resource. This was called a *Genossenschaft* in German, and a *Markegenootschap* in Dutch. In practice an individual member could be anything from a peasant farmer to a noble, a village commune, a corporation or a monastery. They enjoyed material rights over a set area of land and usually had their own regulatory institutions. They seem to have been particularly associated with large woodland areas.
- 4) All residents in an area, or in fact any subjects of the local ruler, had rights. This was only the case with very large and virtually inexhaustible commons, as can be found in northern Sweden. In Flanders, it was occasionally found that anyone who resided within a certain distance of some large commons had rights (the so-called "vrijdom"). They had either their own local regulatory institutions, were effectively free, or for some resources, came under auspices of the central administration, such as state foresters. In the German states one often finds the case that all subjects of a ruler were permitted to enjoy a limited set of resources, such as collecting deadwood on specified days, as part of a generalised obligation of the ruler to guarantee subsistence.

Overall we can say that the regulation of access to commons became more exclusive, in particular from the end of the 16th century onwards (following the population rise): new conditions to be allowed to the common were introduced. Firstly, rights were limited to particular households, farmsteads or even buildings. In both England and parts of Germany the readiness of users to make this distinction comes to light more clearly in the second half of the sixteenth century, in particular where tenancies tended to be subject to impartible inheritance such as in the northern German *Genossenschaften*. Elsewhere - that had previously accorded all residents rights- a related form of restriction was found. A cut-off line was drawn, after which only descendants of those who enjoyed rights before the cut-off point could enjoy rights in the future, a phenomenon found in the Austrian Flanders.²⁴ Secondly, exclusion was enhanced by the municipalities themselves. Authorities limited in-migration by setting barriers to entry such as property requirements and payments. They could limit marriage opportunities, refusing permission to marry to those who might become dependent on poor relief in the future, or requiring permission to marry. The conditions under which these rules were set, were frequently found in German communes, were not necessarily linked directly to the commons, but to a more a generalised fear about income and indigence. People could also have graded rights according to the size of their holding, feudal or communal services owed, or depending on the form of their residence (partitioned or not, for example). These patterns were replicated across many communes in the Netherlands and southern and central Germany.²⁵

In the case study discussed here, commoners who did not descent from a particular group of people who were entitled to use the common, could not claim rights on that common. This kind of access rule is not exceptional; it can be found in several other places in Flanders and the rest of Europe. It is probably the result of the exclusion process as described above: originally (13th-14th century) all inhabitants of the villages Asebroek and Oedelem –where the common was situated- or those who lived around the common could claim rights on the common. Probably the inheritance rule was added at the beginning of the 16th century. This would also explain why there are two possible "correct" etymological explanations of the term "aanborger". The term can be interpreted as "living next to" or as "descendance from". The first interpretation could refer to the original situation (as is still the case in other cases, where the commoners had to live in an area around the common, called the "vrijdom", see earlier); the condition of inheritance was probably added in a later stage, in order to limit the number of legitimate users. At least from the 16th century onwards, the names of the new

²⁴ De Moor M., 2002, in M. De Moor et al.

²⁵(Hoppenbrouwers 2002) and (Warde 2002a)

commoners –and the two witnesses they had to bring along as a proof of their relationship with other commoners- were noted by the local priest in a book, hereby stressing the moral unacceptability of using the common illegally and the importance of being accepted as a member of the "club" of commoners. As I will explain further on, the managers of this common introduced new –juridical and physical measures to exclude others from the common and to limit the possibilities of the commoners to take advantage.

Being a legitimate commoner did however not necessarily entail usage of the common. Their participation could take form in many ways: they could use it for economic purposes –by putting cattle on the common, buying wood from the common, performing tasks for the management of the common, providing beer and bread for the annual meetings,...- or take on managerial positions –like becoming one of the five "hoofdmannen" that were responsible for the daily management, contacts with the local lord and so on. On the basis of an analysis of participatory behaviour of the commoners during the 18th and 19th century, it became clear that more than 70% of the commoners who had subscribed to the common between 1710 and 1760 would in the end also use the common (for pasture, as a labourer,...). Of those who subscribed after the 1790s only half of the commoners would do so. As the total number of annually subscribing (new) commoners grew over time, the relative number of people for whom the common could be an economic or social advantage had clearly dropped seriously. This also means that the number of people that might be interested in another –possibly economically more advantageous- way of managing the collective resource was growing. This will in turn –as I will show later on- have a considerable impact on the way resources were used on this common from the 1840s onwards. The managers of the common were clearly aware of the influence of population growth on the exploitation level. Although use was restricted to commoners only, the managers did allow –on special and explicit request- non-entitled users to use the common for pasture during a restricted period of time until the middle of the 18th century. This rather flexible interpretation of the access rules was caused by the fact that the commoners themselves could not provide sufficient cattle to reach a stable and continuous exploitation level. Except for the occasional gestures towards widows of deceased commoners, the flexibility of the access management was clearly dependent on the sustainable management principles of the managers. The decision to limit the use of the common to those who were legally entitled from the middle of the 18th century onwards and other measures taken thereafter –such as a stricter control of the use of the common by introducing new positions with clear monitoring tasks- were clear signs that the resources of the common needed stricter control, that overexploitation became a threat for the future of the common.

Using the commons

Besides the possible influence of population growth, the common could also be threatened by free-riding by its –ever increasing number of- commoners. Free-riding happens when a commoner uses the common in the wrong or in an excessive way, hereby considering in the first place his own short term advantages and not the general well-being of the local community of users. In the first case, he does not obey the rules by e.g. putting cattle that is explicitly forbidden on the common, with possible qualitative consequences (e.g. destruction of the fence or pasture land). In the second case, the commoner takes more resource units than he is entitled to. One can assume that this quantitative violation tends to become more frequent in case of population growth, but the primary cause is a shift in the behaviour of the commoners, and not necessarily their number. McKean noted this change in behaviour under the pressure of economic development and commercialisation of Japanese agriculture but noted at the same time that other commons had developed techniques to prevent a tragedy of the commons.²⁶ Until the end of the Ancien Régime and in some European economies even until the end of the 19th century, commons formed an inextricable part of subsistence agriculture. They provided the fodder that was necessary to feed the cattle that provided on its turn the valuable manure for the poor and exhausted arable land. Most commoners aimed at providing themselves and their families with a sufficient living standard. Their participation to the markets was limited. In order to prevent the effects of the more commercially oriented behaviour of some of the commoners, rules to preserve the commons for the subsistence economy can be found in many commons regulations.

Depending on the type of resource involved, three different types of rules limiting the influence of commercialisation can be found on the European historical commons. In general the amount of produce a commoner was allowed to take was limited to a certain number of resource units. In some cases, the surface of the common that was often referred to in rules concerning the common was expressed in terms of the number of units of cattle the common could feed. In for example the Wijkerzand common in the central Netherlands, the number of 180 ‘shares’ and their size in the grazing rights of the common, appear to have been laid down in the fifteenth century and survived until today.²⁷ Often, the limitation of the resource units of the commoners was not limited to the capacities of the common but to factors that were directly related to aspects of the subsistence economy –and thus not to the commercial

²⁶ (McKean 1992a: 64; McKean 1992b: 64)

²⁷ (Hoppenbrouwers 2002)

economy- of the commoners. In Flanders we found the following types of –what we can call- "anti-commercialisation rules":

A. Limitations of the number of cattle in proportion to the capacity of the own farm. These rules were meant to assure that the cattle would have sufficient fodder during the period the common was closed. This preoccupation could be "translated" in several different ways:

- a. Only cattle that had spend or would spend the wintertime in the stables of the commoners after the grazing period on the common were allowed. Cattle that was bought only for the period that the common was open to grazing was explicitly forbidden. This is also known as the practice of "levanchy and couchancy" in England.
- b. Cattle from other households than the commoners was not allowed on the common. Hereby the commoner was refrained from using the common for others in exchange for financial benefits.
- c. The number of cattle was limited to the surface of the commoner's arable land so the commoner would certainly be able to feed his cattle with his own produce when the common was closed.

B. Limitations on the sale of direct (wood, berries, ...) or indirect (e.g. the milk of cow that had spend some time on the commons) produce from the commons was forbidden. In some cases the sale of those products was allowed within a certain perimeter (e.g. the village)

C. Limitation of the use of particular resources (e.g. wood) to the needs of the household.

Notwithstanding the efforts to keep the number of new potential users on the Gemene and Loweiden down, the number of "aanborgers" was too high for the limited amount of space that was available. During the 18th and 19th century the total acreage of the common varied between only 80 and 100 hectares. Between 1623 and 1900, on average 7 new persons per year subscribed to the common. Although there was a clear threat of population rise and their was a risk of commercialisation by these commoners, in particular since the common was in the vicinity of a large trading centre (the trading city of Bruges and the important cattle market in Oedelem, a village bordering the common) there were on this common no particular rules limiting the commercialisation of resources from the common. Instead of a particular regulation to limit the use per person –here again the importance of other sources than regulative ones becomes clear-, a flexibly adjustable price mechanism was used to achieve a fairly constant level of exploitation. A mechanism that is so typical for the free market was thus actually used to minimise the possible negative effects of this free market

on the common. Commoners had to pay a price per head of cattle depending on the type of cattle –putting horses on the common was more expensive than cows and far more expensive than pigs. As will be shown on the basis of the bookkeeping, the price per head of cattle was effectively adjusted to the exploitation level of the common during the preceding years. The following graph illustrates the grazing level of the common during the period 1700-1840. Besides the number of cattle per type (horses, cows and pigs) it shows the aggregated total in terms of cattle units and the number of users this cattle belonged to.²⁸ What the graph does not show –because the lack of precise data- is the number of cattle units that were provided by non-entitled users. Until the middle of the 18th century, these "external users" could request the management of the common to let some of their cattle graze for a certain period of time. In 1709 several persons were allowed to put their cattle on the common because there was a temporary abundance of grass. It is possible that this practice was introduced because commoners could not provide a sufficient number of cattle to avoid under-exploitation and because it provided some extra cash income in times of heavy war duties at the beginning of the 18th century. Taking into consideration the extra added number of cattle, the exploitation level of the common was on average 150 CU. Due to political struggles at the beginning of the 18th century, the actual population rise was retarded until the second half of the 18th century. From the 1750s onwards, requests from non-commoners were no longer granted and between 1747 and 1788 the prices for cattle remained stable. Adjustment of the prices to put cattle on the common were no longer necessary until the end of the century.²⁹ In 1763, the common experienced a serious drop in the number of cows (from 155 to 115), which could have temporarily caused underexploitation. Instead of allowing cattle from non-entitled users, as they had done before to solve this problem, the managers decided differently this time: although it was commonly known that these could cause great damage to the common, they decided to accept pigs, but only those of their own commoners. An explanation for this decision might have been the general pauperisation in this period of history: pigs were cheaper to keep than cows or horses and were thus more in reach of the increasingly impoverishing families at the Flemish countryside. The managers must have noticed the effect of pigs on the common quite soon afterwards because they stopped this practice by 1789. For the period 1790-1811 no data are available, but it is likely that the same exploitation level could be maintained until the 1820s. Thereafter the number of cattle pasturing on the common dropped significantly. This was partially a consequence of the reclamation of a small part of the common, hereby reducing the available pasture land, and partially the consequence of the diminishing average number of cattle units per person during this period. In the meanwhile the common

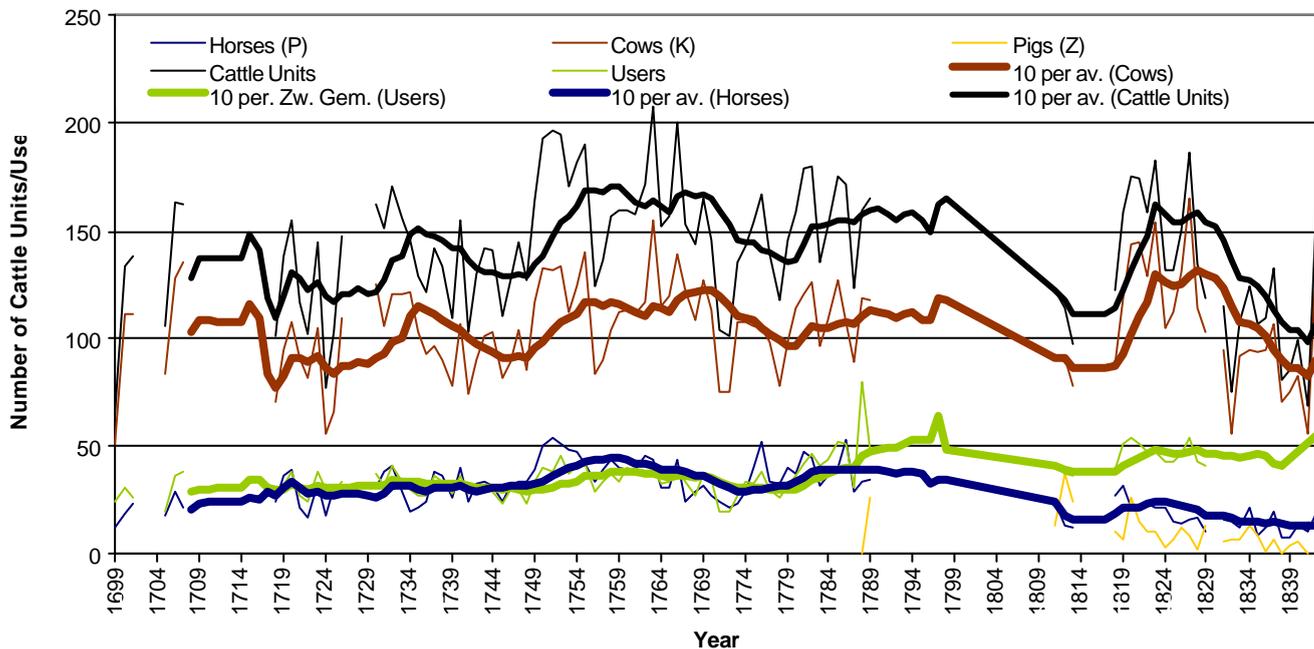
²⁸ CU: cattle units; Weighing coefficients; Cows were considered as on 1 CU, Horses 1,2 CU, Pigs 0,2 CU

²⁹ For the period 1790-1811 there are no accounts available.

became less and less important for its entitled users too (see earlier): the group of active users became –from a relative perspective- smaller and smaller because of the growing number of entitled users.

The exploitation level obtained by the managers was overall fairly stable, apart from the drop at the end of the illustrated period. But wasn't it too high for the rather small pasture? At the height of the exploitation (1750-1759) the exploitation level would have been half a hectare per CU. Considering that during the summer cattle needs around 0,8 ha per cow (or 1 CU) and 0,4 ha was necessary for winter fodder, a total of 1,25 to 1,5 ha grassland per CU per year was necessary around 1800. Considering the surface of the common and the number of cattle per year, the exploitation of the common would have been far too intensive. On the basis of the source however, we know that the cattle received plenty of other feeding, necessitating only 0,4 ha per CU per year.³⁰

Figure 4: Exploitation level of the common (used for grazing by horses, cows and pigs), 1700-1840



³⁰ ({{Slicher van Bath 1960 #5550 /ft " : 325"}})

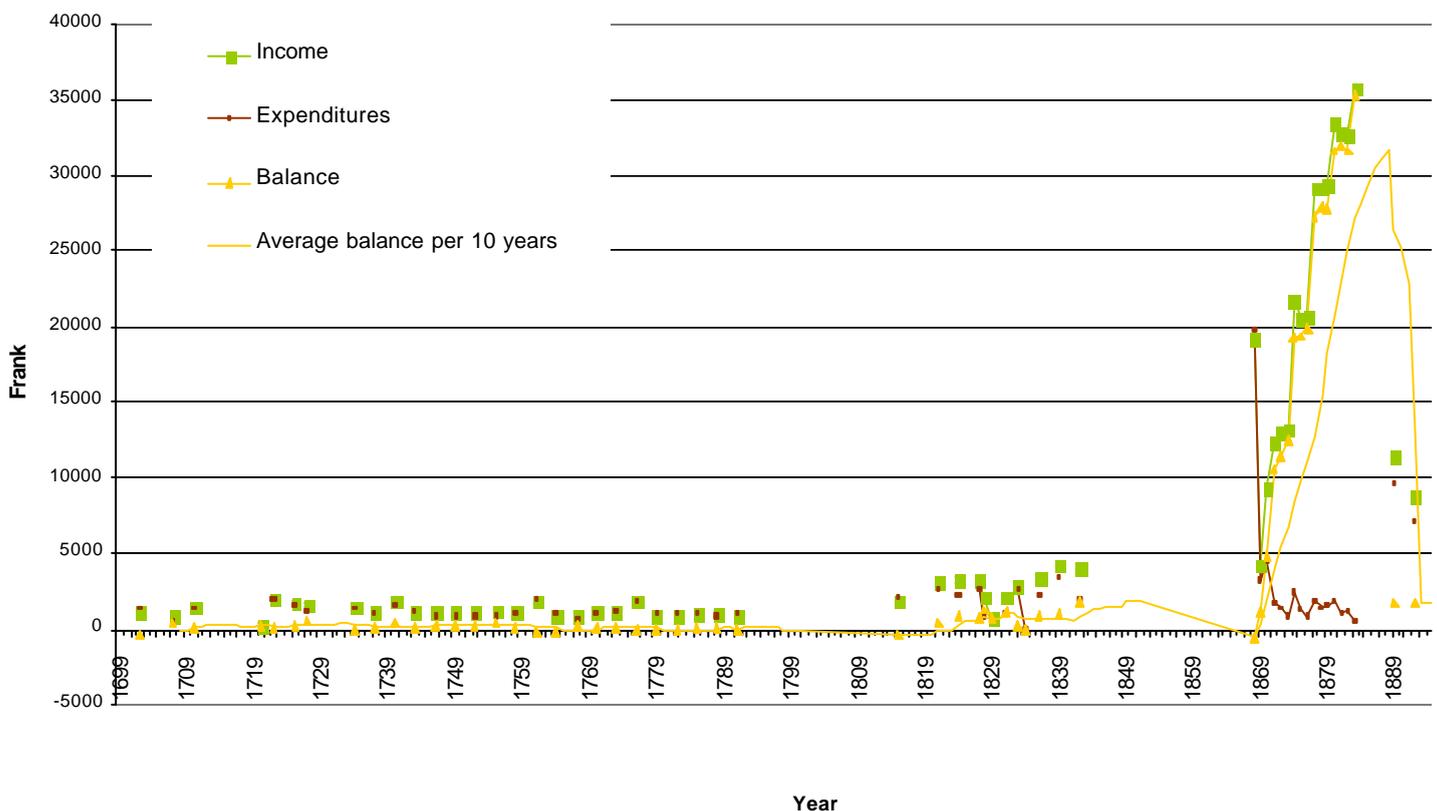
The graph of the exploitation level stops in the 1840s. The reason for this is a serious change in the exploitation method. Whereas before the level of exploitation was regulated by means of prices per head of cattle, during the 1840s the common was split up in several separate parcels. Commoners could hire a piece of land, as had been possible beforehand to a limited degree. The common remained a common in managerial terms but dressed and looked differently: a "travesty" of a common so to say. Although the period preceding this decision was one of sustainable management, the travesty would soon lead to an ecological tragedy. The abolishment of the price mechanism also removed the possibility to manage the common directly. This leaves us with a paradox: commoners had been successful in using and managing the common in a sustainable way but decided to change it into a use system that was most likely going to cause overexploitation. And so it happened: a serious rise in the number of CU per ha followed (possibly up to 5,7 CU per ha) after the abolishment of the "pay-per-cattle-head-system". Although new methods- e.g. the introduction of intensive fertilising methods- may have allowed a higher exploitation level (increased pasture intensity), it is most likely that the replacement of the price mechanism lead to a freer but less sustainable exploitation of the common.

The reason for this change of management can be found in the changes in the social-economic conditions the commoners were confronted with and in the average participation level of the commoners. Not only was the relative number of commoners who actually used the common seriously diminishing, the number of cattle per head dropped during that period too. Moreover, the number of independent farmers dropped, more wage labourers appeared among the commoners and in the Flemish countryside in general. As prices for dairy products and meat were since the 1840s rising -in comparison to those for grain-, a more intensive exploitation of the common had become more attractive too. All these factors lead to the conclusion that the common was no longer in balance: whereas beforehand the utility of the land for the users could be in harmony with an efficient and sustainable management of the resources, the managers, possibly under pressure of the commoners, decided to act at the advantage of the commoners (utility) first. In cases of emergency or retirement the commoners did use their rights; by the end of the 19th century the managers of the common started contributing more to the local charity fund.

The question arises why the commoners –obviously searching for higher profits- did not decide to abolish their common management as a whole. If they were after higher individual profits, why didn't they decide to privatise the common? The reason for this at first sight economically uninteresting form of management can be found in the equity aspect of the common: keeping the common in common management but in private use allowed the

commoners to keep costs per head of user rather low. The sale of land could have resulted in a sum of money for each of the entitled users but would have taken the possibility of the commoners to use the common in times of trouble. Although one can suspect the commoners to strive for profit as individual users, the commons management as a whole did not aim at making profit. The graph underneath shows the evolution of the profits made by the common every three years. Until the 1860s the profit level of the commoners was limited if there was any profit at all. The –comparatively- enormous profits during the period 1862-1882 can be explained by the temporarily usurpation by the local government of the common. During this 20-year period, the commoners were expelled from their common and the management was conducted by a group of local notables. Their primary move was making the land profitable. The commoners however won their case and came into charge again from 1882 to onwards. As the graph shows, the level of profit dropped significantly again. Although the attitude towards the management of the land today might be considerably different, the common was in that time clearly not managed as a source of profit but as a resource for the local community of users.

Figure 5: Evolution of the balance of accounts



Conclusion

In a sense Hardin was right: population growth does cause a lot of stress on a common. Research on European historical commons and on that small common in Flanders has however proved that commoners created and used a lot of different instruments to adjust their needs to the changing circumstances: the management of commons was flexible. In the end it would however not be the total number of people using the common, but the total number of people NOT using the common that would cause the changes in the mode of exploitation. Moreover, it turned out that it was not only the group size and the proportion of active versus passive users within that group, but also the group composition –in terms of their social and economic background- that mattered: not all commoners were wealthy enough to put cattle on the common. As a symptom of the general proletarianisation, the diminishing average number of cattle per person reduced the importance of the common per individual. In principle those passive commoners could have used the commons –they had every right to do so- but the managers arranged the use in such a way that they were financially incapable of doing so. In the case of the *Gemene and Loweiden*, the population pressure had indirectly forced the change of the property regime but not in the classical view of overexploitation as a consequence of an overly intensive use of the common. The change to a privatised use (but not management) of the common did lead to an ecologically less balanced system. The results of this process of overexploitation and the procedures this entailed (e.g. intensive drainage) can be seen in the landscape until today.

How do these conclusions fit into the general theoretical picture? All in all, one can say that the causal explanation for the existence of common property is the most correct: the state of a resource and the type of property regime are closely linked to each other; when they have the liberty to do so, people chose the property regime that leaves them the best options. The choice for another property regime was in the case of this common forced by the changing composition of the group of commoners and their direct interest in the common. The case also shows that a common property regime can function efficiently and does allow a sustainable management but that the will for a sustainable management is not enough when a large part of the community is dependent on the produce of the common, or at least wants to use it in an advantageous way. The change to a private use system on this common did - not surprisingly- take change in times of crisis. At that point in history, the utility of a common was more important to commoners than the ecologically efficient use of it. One of the more general but nevertheless important "lessons" to be remembered from this historical case study is no doubt that it is wrong to see the long term management of a common as a process that leads in the end to sustainable or unsustainable management. Commoners

may have wanted an efficient long term use of their common for themselves and their descendants –as my study of the long term exploitation methods has made clear- but the social and economic conditions did not always allow them to do so. They adjusted their management to the prevailing needs. Their change of use did not necessarily entail a change of –all of- their objectives. Their financial objectives for example were clearly never – except when the commons were temporarily claimed by the local administration- changed: making profit was obviously less important than providing grazing and other facilities for the commoners, even if the composition of the group of commoners had changed. Essentially, the travesty of this particular case study did not change the concept of the common, nor did it change the commoners. It were the commoners that decided that their common needed another way of use. After so many years of using a system that had proved efficient, it must can not have been an easy decision to abolish a tradition of that kind. The commoners' management and use was clearly a difficult exercise in weighing the advantages of efficiency/sustainability against those of utility and equity. And, as with many developments in history, the pair of scales was not always in balance.

Reference List

- Andries, J. O. 1880. "Deux Documents Officiels Et Quelques Réflexions Dans Le but D'Obtenir La Mise Dans Le Commerce De La Grande Terre De Nature Communale, Nommée Beverhoutsveld Située Dans La Commune D'Oedelem, Près De Bruges." *Annales De La Société D'Emulation De Bruges* XXXI:206-59.
- Aristoteles. *Politics. Book II*. Oxford.
- Brakensiek, S. 2002. "The Management of Common Land in North Western Germany." Pp. 225-46 in *The Management of Common Land in North West Europe, C. 1500-1850*, eds. M. De Moor, L. Shaw-Taylor, and P. Warde. Turnhout: Brepols.
- Brakensiek, Stefan. 2003. " Les Biens Communaux En Allemagne. Attaques, Disparition Et Survivance (1750-1900)." *La Propriété Collective En Europe En Amérique Latine, 1750-1900*, editeurs Nadine Vivier and M.-D. Demélas. Rennes: Presses Universitaires de Rennes.
- Bromley, D. W. and D. Feeny. 1992. *Making the Commons Work: Theory, Practice and Policy*. San Francisco: ICS press.
- Ciriacy-Wantrup, S. V. and R. C. Bishop. 1975. "'Common Property' As a Concept in Natural Resource Policy." *Natural Resources Journal* 15:713-27.
- De Laveleye, E. 1891. *La Propriété Collective Du Sol En Différents Pays*.
- De Moor, M. 2002. "Common Land and Common Rights in Flanders." Pp. 113-42 in *The Management of Common Land in North West Europe, C. 1500-1850*, eds. M. De Moor, L. Shaw-Taylor, and P. Warde. Turnhout: Brepols.
- De Moor, M., L. Shaw-Taylor, and P. Warde. 2002a. "Comparing the Historical Commons of North West Europe. An Introduction ." Pp. 15-32 in *The Management of Common Land in North West Europe, C. 1500-1850*, eds. M. De Moor, L. Shaw-Taylor, and P. Warde. Turnhout: Brepols.
- De Moor, M., L. Shaw-Taylor, and P. Warde. 2002b. *The Management of Common Land in North West Europe, C. 1500-1850*. Turnhout: Brepols.
- De Moor, Martina. 2003. " *Tot Proffijt Van De Ghemeensaemheijt*. Gebruik, Gebruikers En Beheer Van Gemene Gronden in Zandig Vlaanderen, 18de En 19de Eeuw." Ghent University, Gent.
- Dolfing, B. 2000. Pp. III-547 in *Waterbeheer Geregeld? Een Historisch-Bestuurskundige Analyse Van De Institutionele Ontwikkeling Van De Hoogheemraadschappen Van Delfland En Rijnland 1600-1800* B. Dolfing. Leiden : s.n.
- Dolfing, Birgitta. "Design-Principles in Dutch Water Boards and the Applicability for Sustainable Water User Associations Elsewhere." .
- Errera, P. 1891. *Les Masuïrs. Recherches Historiques Et Juridiques Sur Quelques Vestiges Des Formes Anciennes De La Propriété En Belgique* Brussel.
- Ford Runge, C. 1992. "Common Property and Collective Action in Economic Development." Pp. 17-40 in *Making the Commons Work. Theory, Practice and Policy*, 1st edition ed.

eds. D. W. Bromley, D. Feeny, M. A. McKean, and P. Peters. San Francisco: Institute for Contemporary Studies.

Hammond, J. L. and Barbara Hammond. 1911. *The Village Labourer*.

Hoppenbrouwers, P. 2002. "The Use and Management of Commons in the Netherlands. An Overview ." Pp. 88-112 in *The Management of Common Land in North West Europe, C. 1500-1850*, eds. M. De Moor, L. Shaw-Taylor, and P. Warde . Turnhout: Brepols.

McKean, M. A. 1992a. "Management of Traditional Common Lands (Iriaichi) in Japan." Pp. 63-98 in *Making the Commons Work. Theory, Practice and Policy*, 1st edition ed. eds. D. W. Bromley, D. Feeny, M. A. McKean, and P. Peters. San Francisco: Institute for Contemporary Studies.

———. 1992b. "Success on the Commons: A Comparative Examination of Institutions for Common Property Resource Management." *Journal of Theoretical Politics* 4(3):247-82.

Neeson, J. M. 1993. *Commoners: Common Right, Enclosure and Social Change in England, 1700-1820*. Past & Present Publications: Cambridge.

Oakerson, R. J. 1992. "Analyzing the Commons: a Framework." Pp. 41-62 in *Making the Commons Work. Theory, Practice and Policy*, 1st edition ed. eds. D. W. Bromley, D. Feeny, M. A. McKean , and P. Peters. San Francisco: Institute for Contemporary Studies.

Ostrom, E. 1990. *Governing the Commons: the Evolution of Institutions for Collective Action*. L27.37B727 ed. Cambridge: Cambridge University Press.

Vivier, Nadine and Marie-Danielle Demélas. 2003. *Les Propriétés Collectives Face Aux Attaques Libérales (1750-1914). Europe Occidentale Et Amérique Latine*. Rennes: Presses Universitaires de Rennes.

Warde, P. 2002a. "Common Rights and Common Lands in South West Germany, 1500-1800." Pp. 195-224 in *The Management of Common Land in North West Europe, C. 1500-1850*, eds. M. De Moor, L. Shaw-Taylor, and P. Warde. Turnhout: Brepols.

Warde, Paul. 2002b. "Law, the 'Commune', and the Distribution of Resources in Early Modern German State Formation." *Continuity and Change* 17(2):183-211.

———. 2003. "La Gestion Des Terres En Usage Collectif Dans L'Europe Du Nord-Ouest." Pp. 61-78 in *Les Propriétés Collectives Face Aux Attaques Libérales (1750-1914). Europe Occidentale Et Amérique Latine*, Marie-Danielle Demélas and Nadine Vivier. Rennes: Presses Universitaires de Rennes.