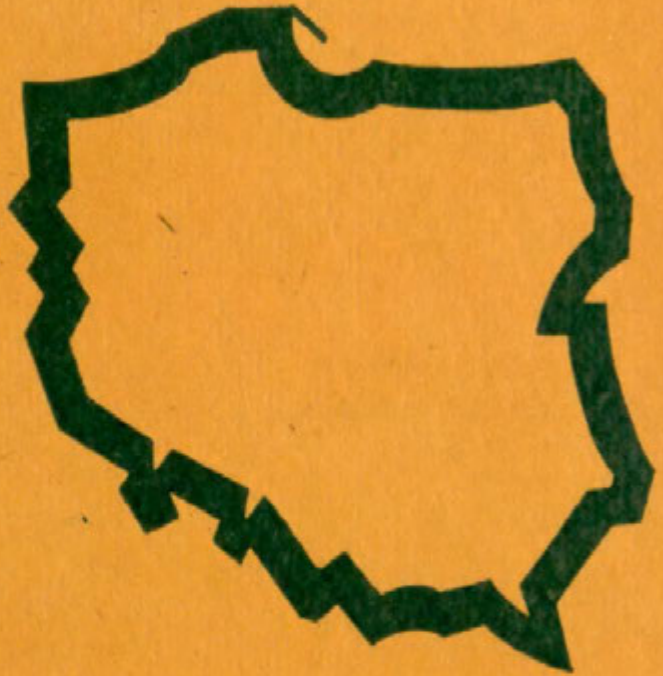


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**RURAL LANDSCAPE AND SETTLEMENT EVOLUTION IN EUROPE**

Proceedings of the Conference,  
Warsaw, September 1975

Edited by

**MARIA KIEŁCZEWSKA-ZALESKA**

with the assistance of

**JERZY GRZESZCZAK and TERESA LIJEWSKA**

**L'EVOLUTION DE L'HABITAT ET DES PAYSAGES RURAUX D'EUROPE**

Actes de la conférence tenue à Varsovie  
en septembre 1975

Volume rédigé par

**Mme MARIA KIEŁCZEWSKA-ZALESKA**

avec la collaboration de

**M. JERZY GRZESZCZAK et Mme TERESA LIJEWSKA**



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## PRÉFACE

C'est en 1957 qu'un groupe de géographes, grâce à l'initiative du Professeur X. de Planhol, a pris part pour la première fois à une conférence ayant pour objectif d'aborder le sujet du développement du paysage rural européen, de comparer les résultats des études et d'échanger les opinions sur les diverses méthodes d'étude. On ne pouvait pas prévoir à l'époque que ce groupe, sans être lié par quelque forme d'organisation formelle, se réunirait souvent et continuerait le travail à long terme (Nancy 1957, Vadstena 1960, Bangor, Birmingham 1964, Wurtzbourg 1966, Liège 1969, Belfast 1971, Pérouse 1973). C'est la huitième conférence qui a réuni à Varsovie du 2 au 7 septembre 1975 les représentants de 16 pays d'Europe.

Comme aux conférences précédentes, les débats à Varsovie ont été consacrés à l'étude de la genèse de l'habitat rural européen. L'endroit où la conférence s'est tenue a déterminé dans une certaine mesure la problématique de la réunion. A Liège la révolution qui se produit actuellement dans les structures agraires liée à l'urbanisation des campagnes était le problème principal, étudié dans le terrain et présenté dans beaucoup de communications. A Pérouse c'était le paysage méditerranéen avec ses grands problèmes historiques et contemporains qui dominait. Pour la conférence à Varsovie on a choisi, entre autres, les problèmes de la genèse des diverses formes de villages de l'Europe Centrale et des formes semblables dans les pays voisins. Cette idée a donné des résultats intéressants. Par exemple, les communications sur les villages avec une place ou placêtre ont été présentées pendant deux sessions — dix auteurs ont donné de divers exemples de cette forme d'habitat qui dans le passé était répandue à l'ouest en Bretagne, ainsi qu'à l'est de l'Europe Centrale, en Mazovie.

En somme il y avait neuf réunions pendant trois jours, présidées à tour de rôle par les Professeurs P. Flatrès (Rennes), A. Krenzlin (Frankfort s. Main), R. Butlin (Londres), S. Helmfrid (Stockholm), A. B. Tschudi (Oslo), L. Patella (Pérouse), S. Berezowski (Varsovie), Ch. Christians (Liège) et X. de Planhol (Paris).

La conférence a eu lieu à l'Institut de Géographie et d'Aménagement du Territoire de l'Académie Polonaise des Sciences, à l'exception d'une session à Wilanów, ancienne résidence du roi Jean III Sobieski. Elle a été suivie d'une visite de ce monument d'art. Pendant les débats on a présenté 43 communications. La discussion, très limitée faute de temps, s'est axée sur des questions principales et se déroulait plutôt dans les couloirs, dans des groupes des spécialistes. C'est pourquoi on a renoncé à publier son contenu.

Après trois jours des débats à Varsovie a suivi une excursion de trois jours dont le but était de montrer de divers exemples des anciennes formes d'habitat rural en Pologne. C'étaient 70 participants de pays étrangers qui ont parcouru une longue route de 700 km. L'itinéraire de l'excursion avec mention des objets visités se trouve à la fin de ce volume.

L'organisation de la conférence était assurée par l'Institut de Géographie et d'Aménagement du Territoire de l'Académie Polonaise des Sciences, avec

le concours de la Commission d'études d'histoire des villages près l'Académie Polonaise des Sciences et de l'Institut d'Histoire de la Culture Matérielle.

Je prends la liberté d'exprimer mes remerciements au Professeur S. Leszczycki, directeur de l'Institut de Géographie et d'Aménagement du Territoire, dont la protection a facilité les préparatifs de la conférence, ainsi qu'à tous mes collègues de la Section de Géographie d'Habitat de l'Institut de Géographie. Ceux-ci ont contribué par leurs soins à la réalisation de la conférence. Je voudrais citer ici surtout Mme Z. Kryńska, qui a assumé la direction du secrétariat, le Doc. P. Dąbrowski, le Dr. M. Jerczyński, le Dr. M. Koter, M. A. Sidor, Mme J. Szewczyk, le Doc. A. Werwicki, qui ont préparé le plan de l'excursion et l'ont guidé avec compétence, ainsi que Mme H. Szulc, Mme D. Bodzak et Mme H. Gudowska qui par leurs efforts ont contribué à l'organisation de toute la manifestation.

*Maria Kietczewska-Zaleska*



## REDUCTION OF AGRICULTURAL LAND IN UMBRIA, 1970-1975

M. ENRICA SACCHI DE ANGELIS AND LUIGI V. PATELLA

The phenomenon of urbanization and the development of industry are obviously related to the area under agricultural exploitation and Umbria is, unfortunately, no exception to this universal process of landscape change.

It should be stated that this phenomenon extends over the years from 1950 to 1965 when numerous small-scale industrial enterprises as well as residential areas arose in the valleys. At first the residential areas spread on hillsides situated near urban centres which in Umbria are most often located on the hilltops. Later they descended to lower terrain near newly established industrial sites.

The sudden economic development after World War II was simultaneously both the cause and result of another phenomenon — the emigration of the rural population. This primarily affected the poorest regions, i.e. the hilly or upland areas which the peasants left for the lowlands, attracted by the prospect of better living conditions. Some acquired small plots of fertile land under cultivation, others had no such opportunity and here the speculation in land parcels was instrumental as it shut off considerable areas within the lowland regions. The peasants who abandoned their land were absorbed into the factories or forced to take up work in other sectors and settled in the peripheries of the towns.

The mass exodus of the rural population is thus one of the reasons for the growth of urban centres. As a result of this, hilly areas of low fertility remained uncultivated while more productive level terrain was unfortunately transformed into housing and industrial zones. In order to envisage the process of the reduction of agricultural areas more clearly it would perhaps be advisable to compile data obtained from the last agricultural register of 1970 together with data obtained from the land-use plans of certain communes in Umbria which contain information relating to the actual situation and the anticipated future development of investment areas.

Existing conditions in those communes which are located within the largest river basins and valleys of Umbria were examined. From these we have taken the following from north to south, respectively: the valley of the Upper Tiber (Valtiberina), the Eugubino-Gualdese basin, the Umbra valley, the valley of the Middle Tiber (Valle del Tevere), the Terni basin, the Perugia region (Perugino) and the Trasimenean basin.

Umbria has an area of 8456 sq. km of which a major part is mountainous. Barely 6% of this area is classified as plain, with 41% as hilly and 53%<sup>1</sup> as

<sup>1</sup> A. Sestini, *Notizie geografiche sull' Umbria*, in: *Guida Italiana del T.C.I., Umbria 1966*, Firenze, p. 11.

mountainous and this despite its moderate altitude above sea level. The mountains and part of the hilly terrain are under pasture and forest and although one can meet all types of cultivation, they occupy a relatively small area which is related to the level of soil fertility.

In the mountain region agricultural production is restricted both by topographical and soil conditions as well as by those of the climate (considerable fluctuations in temperature, late frosts, long periods of drought), to which one might also add the irrational cropping rotations. The traditional use of these terrains is expressed, among other things, by the fact that the production of the holdings is to a large extent concerned with the satisfaction of personal needs. Added to this, a fairly significant fragmentation of holdings is to be found, wherein small farms worked by their owners and measuring 2-5 ha predominate. A consequence of this is that the introduction of modern farming techniques is made almost impossible as the fragmented fields hinder the rational distribution of crops.

The situation in the valleys is completely different. Agriculture has, for a long time, enjoyed favourable conditions of development and, although mixed farming prevails here as well as in the hilly and mountainous areas, industrial crops have been introduced (tobacco, sugar beet and lately sunflowers), which have given excellent results. It is more the pity then, that such fertile terrain, instead of being given over to agriculture, is occupied by housing and industry, often in an irregular manner and, before the approval of the land-use plan, also illegally.

In the mountainous and hilly districts where the emigration of the population was particularly vigorous, suitable conditions were created for tourist settlements and for sporadic instances of tourism linked with cultivation (*agriturismo*). The opposite phenomenon appears, however, in the valley areas; this is the concentration of population from the mountains and upland regions, who, as a result of the proximity of urban centres and contact with another lifestyle, have abandoned agricultural work conclusively. With this has begun a constant decline in number of people employed in agriculture which, thanks to suitable natural conditions, is furthered by the fairly widespread mechanization in these areas. Thus, in the year 1961 the agricultural population constituted 16% of the inhabitants of Umbria and in 1971 only 7%,<sup>2</sup> which indicated a change in the intercensus period of -71,525, or a fall in the agricultural population of 56% in one decade.

One cannot ignore the detrimental results of this phenomenon, even if it has made it possible for the peasants to assimilate the features of the urban way of life, which apparently is fairly positive.

Despite all changes Umbria has remained to this day, in view of its economic structure, an agricultural region. In the last five years the area under cultivation has continued to decline (cf. Table 1). In the valley of the Upper Tiber we note a fall of 1800 ha of agricultural land in relation to the total area of the region. The decline has taken place in all the three communes of the region.

In the Eugubino-Gualdese basin, where areas of fluvial and lacustrine deposits, rich in relatively fertile alluvium, are intensively cultivated, an unusual growth of residential area is notable, during the last 5-10 years, despite the fact that it was already fairly densely settled. The largest expansion of the area devoted to housing and services in absolute terms was noted on the lands

<sup>2</sup> In 1961 the number of people employed in agriculture equalled 126,964, the total population 794,745; in 1975 the agricultural population was 55,439 while the total was 775,783.



of the Gubbio commune where it covered 1300 ha in relation to the 300 ha occupied by industry.

Among the valley areas already mentioned the best known is probably the Umbra valley, a wide trough stretching from Perugia to Spoleto. The topography and the natural conditions favoured the creation of excellent agricultural land cultivated intensively not only on level terrain but also on the hilltops where the cultivation of flowers and of famous olive groves has long been practised. Spoleto, Foligno and Assisi belong to the largest communes where the percentage of agricultural land has decreased in the last five years. In Assisi it should be noted that the industrial area is equal to only one-fifth of the housing and service area. This fact need not be surprising if one takes into account the particular character of the commune centre, which exerts its influence over the whole region. Assisi, the centre of a religious cult and the goal of many pilgrims, has favourable conditions for the extension of residential areas, even beyond the walls of the town, while industry has never expressed any special interest in this region. Thus, industry is represented only by a small number of concerns concentrated on the flat terrain near the town. This situation also results from the fact that almost half the total area of the Assisi commune is mountainous.

In the Spoleto commune the size of the industrial areas is almost equal to the residential areas. In Foligno, the biggest industrial town in the whole valley, the area occupied by industry is equal to exactly half of that devoted to housing and services. The decline of agricultural land in the last five years was not great.

Among the smaller communes, Bettona is in a similar position to Assisi. Bettona is an old town with its roots in the Etruscan age and is a centre of international tourism. Its development and growth into the surrounding terrain is largely due to the foreign influx. A similar situation can be observed in the commune of Spello, whose land-use plan anticipates over 200 ha occupied by housing and services, and about 90 ha by industry. Spello, *splendidissima colonia Iulia*, is also a tourist centre and a tourist settlement has been built on the South-Eastern slopes of Monte Subasio. The extension of housing has sprung up over the last ten years along the state road No. 71 (the Trasimenean). The proximity of a communication route is consistent with the needs of modern settlement. Thus, in the Umbra valley, in relation to 1970,<sup>3</sup> the area of agricultural land has contracted by 4% (Table 1).

In the valley of the Middle Tiber the existing urban centres are of a more agricultural character. They are both smaller and less famous than the towns in the Umbra valley, with the exception of Todi, which is a centre of Etruscan, Roman and medieval tradition, and Deruta, a town producing decorative ceramics. Although this industry dates from the fourteenth century and is today encouraged by the State Institute of Art (*Istituto Statale d'Arte*), here also the phenomenon already noted has to be taken into account, i.e. the more rapid growth of housing in relation to industrial areas. This phenomenon almost exclusively affects the town itself and is explained by the appearance of numerous buildings along the E7 route, where inhabitants both produce and sell ceramics. As a result of this, many fields beside the road have disappeared,

<sup>3</sup> From the agricultural area of Umbria which covers 107,860 ha, 101,594 ha were taken into consideration since the areas of Campello sul Clitunno (4276 ha) and Casel Ritaldi communes were excluded because they lacked approved land-use plans; without data related to changes in land-use it was not possible to compare the areas. In 1975 the area of agricultural land was 97,481 ha.

TABLE 1. Reduction of agricultural land in the examined zones of Umbria

Region	Communes	The commune area (ha)	Agricultural area in 1970 (ha)	Increase in the area of:				Agricultural area in 1975 (ha)	Changes in the agricultural areas
				housing (ha)	services (ha)	industry (ha)	total (ha)		
1	2	3	4	5	6	7	8	9	10
Upper Tiber Valley	San Giustino	8,069	6,509	116	82	7	205	6,304	-3.15
	Citta'di Castello	38,753	29,323	733 <sup>a</sup>		315	1,048	28,275	-3.57
	Umbertide	20,016	16,804	198	153	142	493	16,311	-2.93
	Total	66,838	52,636	1,047	235	464	1,746	50,890	-3.32
Eugubino-Gualdese Basin	Fossato di Vico	3,530	3,172	238	43	81	362	2,810	-11.41
	Gualdo Tadino	12,419	11,305	430	281	43	754	10,551	-6.67
	Gubbio	52,509	46,602	176	1,152	368	1,696	44,906	-3.64
	Sigillo	2,634	2,272	52	13	7	72	2,200	-3.17
Total	71,092	63,351	896	1,489	499	2,884	60,467	-4.55	
Umbra Valley	Assisi	18,684	15,966	490	448	185	1,123	14,843	-7.03
	Bastia	2,762	2,415	335 <sup>a</sup>		86	421	1,994	-17.43
	Bettona	4,520	3,922	119	58	28	205	3,717	-5.23
	Bevagna	5,616	4,554	45	17	17	79	4,475	-1.73
	Campello sul Clitunno <sup>b</sup>	(4,982)	(4,276)						
	Cannara	3,265	2,939	69	21	29	119	2,820	-4.05
	Castel Ritaldi <sup>b</sup>	(2,253)	(1,990)						
	Foligno	26,377	21,922	300	198	247	745	21,177	-3.40
	Montefalco	6,934	6,418	207	1	158	366	6,052	-5.70
	Spello	6,131	4,919	61	143	86	290	4,629	-5.90
	Spoletto	34,963	32,202	210	98	211	519	31,683	-1.61
	Trevi	7,116	6,337	139	57	50	246	6,091	-3.88
	Total	116,368	101,594	1,975	1,041	1,097	4,113 <sup>c</sup>	97,481	-4.05
Middle Tiber Valley	Collazzone	5,581	5,416	64 <sup>a</sup>		21	85	5,331	-1.57
	Deruta	4,594	4,439	43	1	26	70	4,369	-1.58
	Fratta Todina	1,752	1,648	22	3	10	35	1,613	-2.12
	Marsciano	16,155	14,488	320	112	163	595	13,893	-4.11



Table 1 (cont.)

	1	2	3	4	5	6	7	8	9	10
	Monte Castello Di Vibio	3,191	2,845	38	62	6	106	2,739	-3.73	
	Todi	22,301	19,718	250	54	117	421	19,297	-2.13	
	Torgiano	3,788	3,604	46 <sup>a</sup>		42	88	3,516	-2.44	
	Total	57,362	52,158	783	232	385	1,400	50,758	-2.68	
Terni Basin	Terni	21,190	19,461	1,112 <sup>a</sup>		608	1,720	17,741	-8.84	
	Narni	19,786	16,978	197 <sup>a</sup>		464	661	16,317	-3.89	
	Total	40,976	36,439	1,309 <sup>a</sup>		1,072	2,381	34,058	-6.53	
Perugino	Corciano	6,369	5,497	991 <sup>a</sup>		426	1,417	4,080	-25.78	
	Perugia	44,992	34,635	2,961	2,032	787	5,780	28,855	-16.69	
	Total	51,361	40,132	3,952	2,032	1,213	7,197	32,935	-17.93	
Trasimenean Basin	Castiglione del Lago	20,554	14,550	254	519	223	996	13,554	-6.85	
	Lisciano Niccone	3,552	3,238	171	36	6	213	3,025	-6.58	
	Magione	12,981	9,021	106	121	92	319	8,702	-3.54	
	Paciano	1,683	1,911	704	532	85	1,321	590	-69.13	
	Panicale	7,884	6,493	183	11	45	239	6,254	-3.68	
	Passignano	8,166	5,186	117	40	70	227	4,959	-4.38	
	Tuoro	5,558	3,271	45	37	54	136	3,135	-4.16	
	Total	60,378	43,670	1,580	1,296	575	3,451	40,219	-7.90	
TOTAL (all regions)		463,575	389,980	11,542	6,325	5,305	23,172	366,808	-5.94	

<sup>a</sup> Housing and services.

<sup>b</sup> No data available as there is no approved land-use plan.

<sup>c</sup> Total area with the exception of Campello and Castel Ritaldi communes.

but despite everything agriculture continues to occupy 95% of the total area of the commune.<sup>4</sup>

In the last five years agriculture has suffered a loss of 1400 ha of land in the valley of the Middle Tiber, of which 1000 ha have been absorbed by growth in the housing and service area, and less than 400 ha by industry.

The Terni basin is the industrial region of Umbria but, in spite of this, housing areas are still a little more extensive (1300 ha) than industrial sites (1100 ha). The Terni commune itself merits particular attention, for here over 1100 ha are devoted to housing and 600 ha to industry. The large volume of housing provides a focus for migrants bound for Terni in search of work and built up areas have arisen on the edge of the town where they engulfed extensive agricultural areas located on fertile alluvial land.

In the Perugia region (Perugino) the decrease of agricultural land has been considerably greater than in other communes (18%). The unusual development of building in the Perugia commune continues to take place on the periphery of the town. It has now covered almost all the neighbouring hilltops and is expanding further by encroaching on the valley. The town's separate quarters are beginning to unite, forming a dense urban area. Even the more important industrial enterprises<sup>5</sup> have relatively restricted sites and are clearly defined in contrast to residential areas.

In the Trasimenean basin the situation is not very different from that observed in other regions. However, a commune where the phenomenon under discussion has taken a surprising turn is Paciano, the smallest commune on Lake Trasimeno. The data obtained from this commune for the period from 1970 to 1975 reveal a strikingly large fall of 1300 ha in the area of agricultural land, which amounts to -69% of the total area in 1970. This phenomenon is explained by a specific development of tourism, in which former population also participates. Many of those who once emigrated return to these areas and rent or, more often, build summer houses in the countryside and in this they are followed by numerous inhabitants of Rome. One might add that the administrators of the commune favour this activity by facilitating the procurement of planning permission. In this way over 1200 ha of land has been turned over to residential and service areas and only 80 ha to industry.

The total area of all examined regions is 463,575 ha.<sup>6</sup> In 1970, almost 84% of this area constituted agricultural land, but by 1975 this figure had dropped to 79%.<sup>7</sup> Of the 23,000 ha, by which the area of agricultural land has been decreased, a little over 5000 ha has been assigned to industry and more than 11,000 ha to housing, which together with services add up to 18,000 ha of land given in some way to residential needs.

The largest decrease in agricultural land has taken place in the Perugia region. The agrarian landscape, which a few decades ago prevailed in the territory of Perugia and was so characteristic of the area known as "green Umbria", has almost completely disappeared. The areas around Lake Trasimeno take the second place in terms of the reduction of agricultural land. Tourist and dwelling areas predominate there to a significant degree, despite the fact that the region enjoys favourable conditions for the development of other land uses (agriculture, fishing, industry). A smaller fall in agricultural land has been experienced in the valley of the Middle Tiber. These lands, thanks to their

<sup>4</sup> In Deruta commune out of a total of 4594 ha agriculture occupied 4369 ha.

<sup>5</sup> The most important industrial concerns include clothing firms (Spagnoli), confectionery (I.B.P.) and engineering firm (Piccini).

<sup>6</sup> See footnote 3.

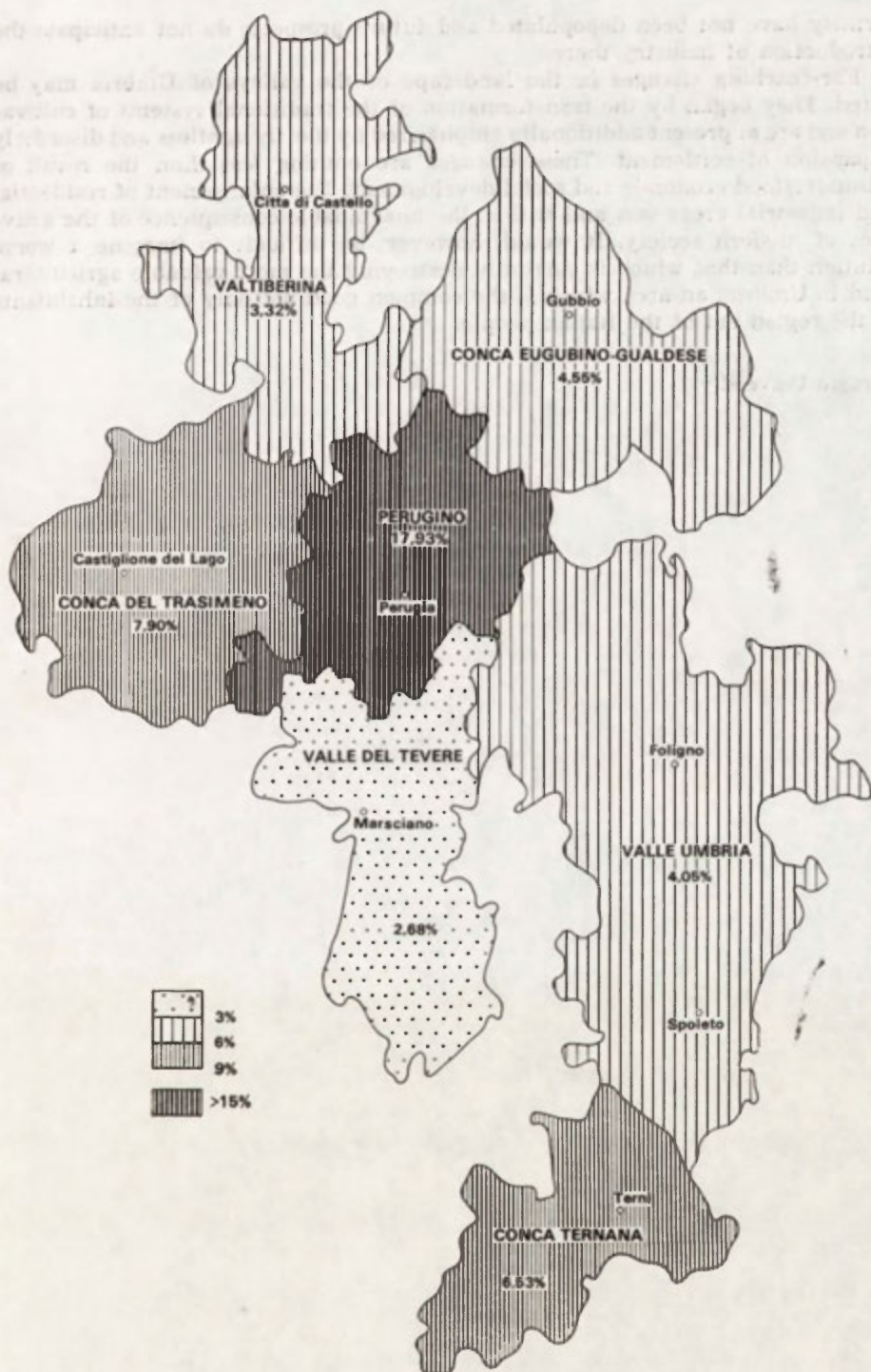


Fig. 1. Reduction of agricultural land in Umbria, 1970-1975

<http://rcin.org.pl>



fertility have not been depopulated and future prospects do not anticipate the introduction of industry there.

Far-reaching changes in the landscape of the valleys of Umbria may be noted. They began by the transformation of the traditional systems of cultivation and are at present additionally emphasized by the thoughtless and disorderly expansion of settlement. These changes are nothing less than the result of misunderstood economic and social development. The enlargement of residential and industrial areas was and still is, the unavoidable consequence of the activities of modern society. It would, however, be difficult to imagine a worse solution than that which is currently destroying the most valuable agricultural land in Umbria, an area which is the common good not only of the inhabitants of the region but of the Italian people.

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## L'ÉVOLUTION DU PAYSAGE DE "MONTADO"

OLIVIER BALABANIAN

Le *montado* se caractérise par un paysage de forêt claire ou de parc arboré (*open forest* pour les auteurs anglo-saxons) s'étendant sur de vastes régions du sud-ouest de la Péninsule Ibérique, en particulier en Estrémadure espagnole et en Alentejo. L'élément dominant de ce paysage est l'arbre qui est toujours un chêne, essentiellement le chêne vert et le chêne-liège mais aussi, parfois, le *Quercus lusitanica*.

Or, ce paysage traditionnel est en rapide transformation. En effet, soit le *montado* subit des modifications structurelles soit il disparaît. Déjà, en Estrémadure où l'évolution est très sensible, rares sont les régions qui, telle celle de Jerez de los Caballeros, possèdent encore la moitié de leur surface en *montado*. Sur la défensive, à tel point que l'on se demande s'il ne va pas disparaître complètement, le paysage de *montado* semble avoir perdu la plupart de ses supports humains.

## LES FONDEMENTS HUMAINS DU MONTADO

Le *montado* est un aménagement de la forêt climatique en vue d'une authentique économie agro-sylvo-pastorale avec une forte prédominance de l'élément pastoral et la subordination de l'élément culturel.

*L'élément pastoral.* Dans l'économie traditionnelle, une place d'honneur était réservée aux porcs, de loin les meilleurs utilisateurs de la chênaie. Ceux-ci, dès l'âge d'un mois, étaient élevés en plein-air intégral. Ils se nourrissaient tant bien que mal dans les pâturages et les chaumes et attendaient la période de la *montanera*, c'est-à-dire de la glandaie. Celle-ci durait en moyenne trois mois, entre octobre et janvier en général. Les porcs étaient vendus avec un poids moyen de 120 kg, poids atteint entre 15 et 22 mois. L'image du porcher, à la tête d'une centaine de porcs au pelage noir ou roux, gaulant les glands était inséparable du *montado*.

L'élevage porcin, quoique dominant, n'a jamais été exclusif. Toutes les exploitations possédaient des ovins et, souvent des bovins et des caprins. Les ovins surtout étaient à même d'utiliser les chaumes et les herbes poussant sous les chênes. En raison de la prédominance des herbages ras, ils étaient les mieux adaptés. A la fin de l'hiver, période de pénurie, les ovins consommaient les feuilles des branches de chêne coupées au cours de la taille des arbres (*ramoneo*). Dans ce cas, le chêne procurait un pâturage aérien.

Porchers, bergers et aussi vachers et chevriers étaient les personnages essentiels de la grande propriété sur laquelle s'étendait presque exclusivement le *montado*. Le grand propriétaire était d'abord et surtout un éleveur avant d'être un forestier.

*L'élément forestier.* Il reposait sur l'exploitation du liège d'une part, le bois et le charbon de bois d'autre part.

Le liège est enlevé, en été, par des spécialistes, tous les neuf ans environ. Dans certaines exploitations alentejanas, le liège arrivait en tête des revenus, avant même l'élevage.

Bois et charbon de bois n'étaient que les sous-produits de la taille des arbres, à une époque où les cuisinières ignoraient tout autre combustible. La taille, en hiver, était effectuée pour obtenir des chênes une fructification maximum; ceux-ci étaient pratiquement traités avec les égards dûs aux arbres fruitiers. Par ailleurs, en atténuant l'ombre portée au sol, la taille rendait possible la culture.

*L'élément cultural.* Il s'agissait surtout de céréales, différentes en fonction de la qualité des sols, parfois de légumineuses. Ces cultures étaient à la fois secondaires et essentielles.

Secondaires de par le revenu global que l'on pouvait en tirer. D'abord, une part modeste des surfaces était cultivée: la sole semée prenait place dans un assolement quinquennal inversé, parfois la place de la jachère pouvait être encore plus importante. Par ailleurs, les rendements étaient très faibles: 5 à 10 quintaux de grain par hectare en moyenne.

Essentielles car elles permettaient de maintenir en état les herbages et les chênes; le labour tous les 5 ou 6 ans empêchant le développement du matorral. Les labours se faisaient à l'araire, rares étaient les surfaces qui n'entraient pas dans ces rotations; même les pentes fortes pouvaient être cultivées et recouvertes de *montado*. Pour la culture dans le *montado*, l'araire représentait l'instrument idéal ne portant aucun préjudice aux racines des arbres tout en restant suffisamment souple pour éviter les obstacles. Enfin, la présence de la sole cultivée était essentielle car elle faisait intervenir, la plupart du temps, un personnage original: le *seareiro* portugais ou le *yuntero extremeño*. C'est lui qui possédait les outils nécessaires au labour, attelage de mules et araire, travaillait sous le statut de métayer précaire; il n'avait le droit de se maintenir sur la terre qu'entre le moment où il traçait le premier sillon et celui où il enlevait la dernière gerbe.

Cultures, herbages et produits tirés des arbres, tout en restant intimement liés, représentaient en fait une véritable stratification économique; chacun de ces éléments pouvait connaître un sort particulier en cas de vente ou d'affermage. Les arbres étaient, et restent, protégés par la loi qui prévoit une densité minimum de 45 arbres par hectare. Tout ceci engendrait de grandes complications au moment des héritages. A cette stratification économique répondait une stratification sociale complexe depuis le plus modeste des aides de *seareiro* jusqu'au grand propriétaire en passant par les administrateurs et les spécialistes.

Cet édifice économique et social sur lequel reposaient les authentiques *herdades* alentejanas et *dehesas extremeñas* est resté intact jusqu'à la fin des années 50. C'est alors que des craquements puis des fractures ont ébranlé cet ensemble. Le *montado* est aujourd'hui en pleine mutation.

## LES MUTATIONS

Elles s'imposent immédiatement à l'observateur; on assiste presque partout à un éclaircissement du *montado* et, dans de nombreux endroits à sa complète disparition. Ces changements sont le fait d'une série de facteurs qui, dans les années 60, ont complètement bouleversé les assises économiques et sociales sur lesquelles s'appuyait le paysage de *montado*. En fait, et progressivement, tous les produits issus de la chaîne devinrent sans utilité ou sans valeur.



Le premier craquement, terrifiant, bien que l'on en ait mal apprécié les conséquences dans l'immédiat, fut la peste porcine qui détruisit brutalement les troupeaux. On tenta, pendant quelques années encore, d'élever des porcs selon les méthodes traditionnelles mais l'impossibilité, aujourd'hui encore, d'éliminer l'épizootie condamna à mort le système de la *montanera*. Du coup, les glands perdirent l'essentiel de leur importance. Avec l'énergie du désespoir, on essaya de maintenir la relation porc-gland: puisque les porcs ne pouvaient plus aller à la glandaie, on irait ramasser les glands. Des ateliers, même, se créèrent pour transformer les glands en aliment pour le bétail. On s'efforça de tirer le maximum de cette précieuse source d'hydrate de carbone. Mais on se heurta alors à deux autres inconvénients: le changement des habitudes alimentaires et la raréfaction de la main-d'oeuvre.

En effet, la qualité des porcs produits ne correspondait plus au goût des Ibériques. Les porcs de race ibérique, au pelage noir ou roux, trouvaient de plus en plus difficilement preneur sur le marché en raison de leur excès de graisse. La concurrence des élevages industriels leur fut fatale.

Simultanément, l'exode rural, tard venu mais massif, épongea en une décennie les excès de main-d'oeuvre. Les premiers à partir furent précisément les *seareiros* et les *yunteros* qui entretenaient la chênaie. Il devint vite inconcevable de continuer à cultiver la chênaie. La disparition des journaliers rendit antiéconomique d'entretenir les chênes comme des arbres fruitiers. La mécanisation fut, pour le *montado*, un mal; les arbres devinrent une gêne considérable au moment même où le sud-ouest de la Péninsule Ibérique entrait dans une véritable révolution culturelle. Tracteurs et surtout moissonneuses-batteuses ne pouvaient plus évoluer sans d'énormes pertes de temps entre des chênes qui nuisaient aux autres récoltes.

Ainsi, la chênaie, tout en devenant une gêne, perdit-elle progressivement tout intérêt pastoral; elle vit fondre aussi tout son intérêt forestier. Bois et charbon de bois sont repoussés par les ménagères qui leur préfèrent le gaz. Enfin, le liège a vu, tout au long des années 60, son cours se dégrader. De plus en plus gravement concurrencé par les matières plastiques et les autres produits de substitution, on a pu craindre, un moment, sa disparition.

Ce cumul de facteurs portant, en même temps, atteinte à la chênaie condamne-t-il irrémédiablement à mort le *montado*? On pourrait se demander si celui-ci n'est pas associé à une mise en valeur inefficace des *secanos*. N'est-ce pas un paysage fossile marque d'un traditionalisme qui s'abrite derrière une législation désuète et en temps que tel condamné, à terme, à disparaître?

#### L'AVENIR DU MONTADO

Il n'est pas du tout certain que le *montado* disparaisse complètement. Il est toutefois très sûr que son recul, déjà marqué, va s'accroître.

Le *montado* a, évidemment, disparu de tous les grands périmètres irrigués. Autrefois partout présent, même sur les *barros*, il va régresser très vite de toutes les zones où l'intérêt culturel l'emporte sur tous les autres. Aussi, le *montado* va-t-il disparaître, plus ou moins rapidement, de tous les bons sols et même de tous les sols agricoles mécanisables, c'est-à-dire de presque toutes les surfaces planes. Il n'est pas imaginable que l'on s'en tienne à des demi-mesures et que l'on se contente de simples éclaircissements du *montado* (paysage dit de *monte hueco*). A l'avenir, ou bien telle zone aura un intérêt culturel évident, et alors le *montado* sera complètement détruit, ou sa structure sera radicale-

ment modifiée ou bien l'intérêt sylvo-pastoral l'emporte et alors se pose le problème de la survie.

C'est donc sur les terres non mécanisables, car trop en pente ou n'ayant pas assez de sol, ou sur les sols impropres à la culture qu'il faut reconsidérer la valeur de la chênaie. Celle-ci n'est pas sans valeur, loin de là.

Si l'on n'a pas encore trouvé de débouché satisfaisant pour le bois, on a trop étroitement associé porcs et glands. On a peut-être trop négligé le fait que les glands pouvaient, et avec grand profit, en hiver alors que les autres pâturages font défaut, entrer dans l'alimentation d'autres animaux, des ovins par exemple qui en sont très friands. Par ailleurs, si l'ombre portée par les arbres porte préjudice aux herbages au début de l'été, cet inconvénient est compensé, en partie du moins, par la protection contre les gelées ce qui permet une plus grande précocité. L'ombre est d'autre part nécessaire aux troupeaux pendant les heures de forte chaleur estivale. Ainsi, y compris dans les zones aptes aux cultures, le maintien de bouquets de chênes reste souhaitable.

La chênaie, enfin, n'est pas dépourvue d'intérêt écologique et même politique. La pénurie de main-d'oeuvre n'est plus qu'un souvenir au Portugal et les défenseurs les plus acharnés du montado, fût-ce du *montado* de chênes verts, sont les syndicats. Ceux-ci voient dans la taille des arbres une source inépuisable de journées de travail. Le fait que l'entretien des chênes verts sur des terres agricoles soit non seulement antiéconomique mais aussi préjudiciable à la production globale ne peut les détourner de leurs intérêts immédiats.

Il faut traiter à part le *montado* de chênes-lièges. La remontée fulgurante des cours du liège dans les années 70, en dépit de la chute sensible du prix en 1975, redonne à la subéraie toute son importance; et ceci, d'autant plus que les chênes-lièges ont la plupart du temps été conservés sur les sols les plus ingrats.

## CONCLUSION

Le *montado* va encore reculer mais il ne mourra pas. Son acception recouvrira une réalité économique différente: pastorale, forestière ou mixte.

Le déclin du *montado* sera bien différent en fonction de sa composition; la subéraie ne sera que peu affectée par l'évolution, les autres chênaies seront par contre touchées au maximum. Aussi, le recul du *montado* sera-t-il différent de part et d'autre de la frontière: parce que les subéraies y sont beaucoup plus nombreuses et pour des raisons politiques, le *montado* se maintiendra bien mieux au Portugal qu'en Espagne.

Université de Limoges



## ÉLÉMENTS À PRENDRE EN COMPTE POUR LA CLASSIFICATION DES PAYSAGES AGRAIRES EN RELATION AVEC LES TENDANCES RÉCENTES

MARIA DE BOLÓS

Les classifications récentes des paysages agraires tendent à rechercher tous les éléments qui présentent, par une certaine partie, un caractère intégrateur et, par une autre partie, qui tendent à capter toute la réalité complexe (J. Bonnamour, 1973). On recherche, également, une classification qui soit valable pour tous les paysages agraires du monde et, de cette manière, à pouvoir établir des comparaisons correctes.

Dans presque toutes les classifications, il y a un aspect dont on ne tient pas souvent compte, c'est la relation qui existe entre la végétation cultivée et le système naturel auquel elle se substitue et pourtant, ce concept est absolument indispensable pour une définition globale du paysage agricole.

*Relations entre la végétation du champ de culture et le système naturel ou géosystème correspondant.* Pour établir les relations entre le champ cultivé et le système naturel correspondant, il est nécessaire de connaître, à fond, et de manière complète le géosystème (conception définie par G. Bertrand, 1969) à l'intérieur duquel le champ ou les champs cultivés se trouvent compris. L'idée de géosystème nous offre une vision intégrée de tous les éléments abiotiques, biotiques et anthropiques du paysage au moment où ceux-ci acquièrent une stabilité et un équilibre.

Dans tous les géosystèmes on distingue différents géofacies, c'est-à-dire, des secteurs qui ont subi l'action anthropique et qui se trouvent, par conséquent, à un degré déterminé de déséquilibre. Si cette action cessait, tous les géofacies évolueraient vers le géosystème général qui les renferme tous.

Il y a de nombreux types de géofacies (exploitations forestières, pâturages artificiels, cultures, etc.), mais, entre tous, en raison de leur importance quantitative, se détachent les champs de culture.

L'action de l'homme cause toujours dans ces géofacies: (1) une diminution de l'organisation biologique, (2) une réduction de la diversité, (3) une diminution de la stabilité du système naturel.

La connaissance du géosystème et de son potentiel écologique nous offre le point de départ pour définir, de manière précise, la quantité d'énergie auxiliaire ajoutée par l'activité de l'homme dans les différents secteurs (géofacies) transformés grâce à son action. L'augmentation de cette énergie conserve une relation directe avec la diminution de l'organisation biocoenotique, et en même temps, la diminution de cette organisation biocoenotique exige une augmentation de l'organisation spatiale si l'on désire maintenir l'équilibre du système. Il est certain que l'homme a, moyennant l'apport d'énergie auxiliaire, la possibilité de s'émanciper totalement du monde physique, mais, il est non moins certain qu'il en est tributaire, en conséquence du besoin de l'apport de l'énergie



auxiliaire et de l'organisation spatiale, justement en fonction de sa meilleure utilisation.

Dans toute culture, l'homme fait rétrograder l'écosystème naturel qui passe d'un stade généralement mûr à un système jeune (P. Odum, 1969). Tous les champs de culture constituent des écosystèmes jeunes dans lesquels la production est très élevée et l'excès d'énergie produite est approprié par l'homme. Pour préciser les modifications que l'action du travail de la terre introduit dans le système naturel, on peut effectuer des études de détails des différents éléments et particulièrement sur: (a) le sous-sol (état d'altération de la roche), (b) le bilan de l'eau, (c) le bilan de l'énergie, (d) le sol (modifications chimiques et physiques), (e) la micro- et macro-faune, (f) la végétation (flore, couverture, pyramide, production de biomasse).

Cependant, on ne peut prendre seulement que trois aspects qui par leur caractère intégrateur sont indicateurs des variations des autres éléments et qui sont: la production de biomasse, les modifications dans la composition chimique du sol et la quantité d'énergie auxiliaire ajoutée. Ces trois aspects sont également susceptibles d'être quantifiés d'une manière relativement facile.

*Concept de tension de culture.* Nous dénommons tension de culture la différence qui existe entre les exigences écologiques des plantes cultivées dans un champs déterminé et celles du géosystème correspondant.

Les plantes cultivées peuvent être classées conformément à leurs exigences écologiques, dans des groupes similaires à ceux des plantes non cultivées, par exemple, héliophylles, hygrophylles, ou bien méditerranéennes, atlantiques. Mais s'il est bien certain que dans la végétation naturelle il existe une étroite relation entre les exigences écologiques des plantes et les caractéristiques du milieu, parmi les plantes cultivées, à cause des exigences humaines, les relations indiquées manquent souvent. Pour que ces plantes puissent vivre et donner de bons rendements il faut apporter l'énergie auxiliaire nécessaire, apport qui devra être d'autant plus élevé que plus éloigné se trouve le milieu de l'optimum écologique de la plante cultivée. Cette quantité d'énergie ajoutée nous indique la *tension* que la culture maintient pour vivre et pour être plus ou moins productive. La tension de culture sera toujours plus grande, dans une culture de potager, dans un pays méditerranéen que dans un pays atlantique.

*Conclusion.* A notre avis, on doit introduire dans les classifications des paysages agraires ce concept de tension de culture qui nous offre la relation entre les exigences écologiques des cultures et le milieu naturel dans lequel elles se développent.

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## TYPES AND FORMS OF THE MEDIEVAL SETTLEMENT EXPANSION PROCESS IN THE CENTRAL PARTS OF THE SOUTH OF THE EASTERN ALPS<sup>1</sup>

HANS BECKER

For good reasons the Eastern Alps have been considered to be a region in which the medieval settlement expansion process in general — and that of the High Middle Ages in particular — have proved to be of great importance. Settlements which date back to that time constitute a high percentage of the total number of settlements in the Eastern Alps. Numerous special investigations made by several authors have always confirmed anew that feudal landlords or sovereigns initiated and regulated the process of settlement expansion. Therefore it seems understandable that the settlement expansion process directed by landlords is still today considered as the significant type of inner colonization in the Eastern Alps during the High Middle Ages.

What has been scarcely noticed, however, is the fact that at the same time there existed still other types of settlement expansion. Recent publications have produced a number of individual examples for this fact; particularly for the central region in the south of the Eastern Alps. Therefore previous conceptions of only one type of inner colonization characteristic for the time of the High Middle Ages will necessarily have to be modified — at least as far as the region investigated is concerned.

On the basis of our present knowledge a first attempt to systematize the different types of medieval settlement expansion for the south of the Eastern Alps shall be made and put up for discussion. In addition to that I shall try to outline the exceptional position of the different types under some aspects of social geography in this special historical period.

### TYPES OF THE MEDIEVAL SETTLEMENT EXPANSION PROCESS

Attempting to systematize the various processes of settlement expansion in the investigated area we may discern the following types:

#### 1. SETTLEMENT EXPANSION PROCESSES REGULATED BY FEUDAL LANDLORDS

The settlement expansion process resulted from a declaratory act of the manorial nobility; that means: the foundation of settlements was initiated by landlords or sovereigns. They used to commission clearance masters (*Rode-meister*) or similar persons to divide up a then unsettled area which had been assigned to them and to distribute it among farmers who went to live there. The

<sup>1</sup> For his kind help with the English translation of this paper I am greatly obliged to my friend Studiendirektor Claus Traumann (Meschede).



thus established new farms became subject to duties imposed on them by the feudal landlord or sovereign.<sup>2</sup>

Essential condition for this was the landlord's effective power of disposition over the common land (*Allmende*), based on the principle of his supreme ownership of all the land that was not specially used by individual persons (see Wopfner 1906).

## 2. SETTLEMENT EXPANSION PROCESSES REGULATED BY UPPER MIDDLE CLASS CITIZENS

This type is found in the surrounding countryside (*contado*) of Italian cities. The cities forced the landowning nobility of the vicinity to take up residence within the city boundaries.<sup>3</sup> Thus in the cities there developed the *signoria*. In the course of this process the real estate passed into the hands of upper middle class citizens who then started individually to organize the landed property along rational lines. That meant, e.g., that single farms were established which were given to semi-tenants (*mezzadri*). This kind of settlement expansion process meant primarily a re-arrangement of the existing settlement pattern; it did not include a new process of settling in uninhabited areas. The phenomenon is known to us particularly from Central Italy (Braunfels 1963; Dorrenhaus 1955 and 1959, p. 61 ff.; Waley 1969). With the region investigated the Val Belluna and — probably — the countryside near Trento provide examples (see Becker 1974, p. 139 ff.).

Neither for the Val Belluna nor for the surrounding countryside of Trento, however, could I find direct supporting documents for the indicated change of the cultural landscape. The interpretation therefore is necessarily based on analogy. Our hypothesis is strongly supported by the elements of the cultural landscape.<sup>4</sup> Also the general facts of the regional history concerned fit well into the whole picture: particularly the efforts to develop City Republics (*freie Kommunen* as interpreted by Dorrenhaus) and the conflicts between the Guelfs and the Ghibellines. The process of settlement expansion in the Val Belluna apparently did not come to an end after the annexion by the Republic of Venice (1404). Migliorini (1932, p. 24) reports about the continued foundation of single farms and small villages at the time of Venetian rule.

## 3. EXPANSION OF SETTLEMENTS UNDERTAKEN BY A PEASANT POPULATION AND TOLERATED BY THE FEUDAL LANDLORDS

The activity of clearing the land and laying out new farms was in this case due to the individual initiative of the peasant population in a territorial domain. The owner of the territory tolerated the process of settling but did

<sup>2</sup> A characteristic example for this very common type: On February 16th, 1216, Bishop Frederic of Trento invested Oldorico and Henrico de Posena with the heights of Costa Cartura in the Lessinian Alps from Folgaria to Centa under condition that there should be founded at least twenty new farms and that peasants should be sent there to divide up the area, cultivate the land and pay rent to the Bishop (Kink 1852, no. 132, pp. 304–306).

<sup>3</sup> See Ennen (1953, p. 257 ff.) who quotes in part the document of Frederic I (dating from 1182) in which the City of Trento is prohibited to force the landowning nobility to become residents there.

<sup>4</sup> Single farmsteads; semi-tenant farms whose buildings with their elements of city architecture demonstrate that they were constructed by architects from the city by order of proprietors who were city residents; villas placed right on the arable land to which belong semi-tenant farms; functional dependence of these semi-tenant farms on upper middle class citizens (as proprietors) who were laymen concerning agriculture (see Becker 1974, p. 139 ff.).



not regulate or support it systematically. The newly established farms were subject to payment of duties to the owner of the territory. Timmermann (1957) gives a detailed description of a corresponding process in the area of the Tegernsee. Feudal landowner was the Monastery of Tegernsee, which held the supreme ownership of the whole territory but until the High Middle Ages the sovereign's power was not yet consolidated. According to Timmermann this particular form of settlement expansion dates back to the time before the High Middle Ages; which means: before strict territorial regulations were reinforced. Therefore we may say that the settlement expansion process undertaken by farmers and tolerated by the feudal landlords took place at the time of a still less severe and rather nominal rule.<sup>5</sup>

#### 4. EXPANSION OF SETTLEMENTS UNDERTAKEN BY FARMERS' CO-OPERATIVES

The community of an Alpine valley, organized as a co-operative, used to regulate the process of settling on the then unsettled common land completely by itself, i.e. without being influenced by a landlord or sovereign. The new settlements remained associated with the valley community and subject to its duties. It was an essential condition for this kind of settlement expansion that the farmers' co-operative succeeded in either rejecting the feudal landlord's or sovereign's claim of a control over the common land or even preventing such claim from the start. To our present knowledge two different forms can be distinguished in this type of settling process during the High Middle Ages (see Becker 1975a):

(a) Settlement expansion through gradual transformation of temporary settlements into permanent ones by inhabitants of older settlements in the same valley. With the decontrol of parts of the common land for special use (and thus for the establishment of temporary settlements) the valley community regulated this process indirectly. Evidence for this kind of inner colonization could be established for the valley of Fiemme (Western Dolomites). That such foundations were indirectly regulated becomes all the more evident if we consider the fact that also in other cases the valley community would occasionally release small parts of the common land for special, individual use though only under the express condition that no buildings should be erected.

(b) Foundation of new settlements directly planned and regulated by the community. The farmers' co-operatives allotted parts of the common land to persons as an entail and at the same time permitted farmsteads to be set up. It subjected these new farms to duties.<sup>6</sup>

Both forms of this type of settlement process were only possible in cases where the farmers' community practically held the unlimited power of disposition over the common land. This was the case in the valley of Fiemme, for the community of Fiemme had been granted remarkably extensive privileges by its sovereign, one of these being the unlimited right of property concerning the common land.

A valley community with similar privileges was the Cadore (Eastern Dolomites). Quite in contrast to Fiemme, however, the development of 'inner auto-

<sup>5</sup> These new-founded settlements consisted of farms large in size, situated on the fringe of the land-mark. Later small farms ('Seldner', etc.) were separated from already existing farms in the course of 'inner colonization' (according to Timmermann).

<sup>6</sup> Such a type of settlement-foundation is authentically recorded in a document of 1245 (edited by Huter 1957, pp. 238-240). The endowment was made in the form of a deed by representatives on behalf of the attending vicini of Fiemme and on behalf of the whole valley community (cf. Becker 1975a).

nomy' for the farmers' valley community was a historically late phenomenon (beginning in 1337). Before that time the Cadore had experienced a period of feudal landlordism. Resulting from these two phases of historical development there exist in the Cadore older settlement foundations influenced by feudal landlords and besides that more recent foundations initiated by farmers' co-operatives (see Becker 1975b).

#### ASPECTS OF HISTORICAL-SOCIAL GEOGRAPHY CONCERNING THE EXCEPTIONAL POSITION OF THE DIFFERENT TYPES OF SETTLEMENT EXPANSION

Settlement expansion processes have always been initiated and regulated by certain individuals or groups; they thus reflect a certain conception of the initiator (or initiators) and their personal system of values (and standards). The initiators were members of a certain (historical) social group and consequently acted as such. Therefore the settlement expansion is a process influenced by social groups. If now — as has been indicated by examples in this paper — members of different groups (landlords, farmers, upper middle class citizens) initiated and regulated certain settlement processes, we must ask ourselves, in which way the fact that these people belonged to a particular social group influenced the process itself.

Of course, we can only select a few aspects from this wide complex of problems and must necessarily generalize. For a detailed analysis the available space is naturally too limited. Moreover, the records at hand do not yet permit a full treatment. The chosen examples, however, may underline the general importance of a social-geographical view even for historical geography.

Primarily essential differentiations result from the different attitudes of the various initiators towards the common land. Landlords were usually interested in founding there as many new taxable farms as possible. On the other hand, the farmers' communities tried to protect their manifold beneficial interests in the common land, e.g.: they sought to preserve the entireness of it. The aims of the two groups were thus diametrically opposed. It is therefore not surprising that settlement-foundations regulated by landlords show signs of a highly intensive utilization (of all chances for settling),<sup>7</sup> whereas the farmers' communities followed a rather restrictive tendency in the expansion of settlements. As a result of this group-specific mode of behaviour we can notice that in the places where farmers' co-operatives regulated the process of expansion (e.g., in Fiemme), a far larger area of the common land has been preserved<sup>8</sup> than in comparable districts where the expansion process was regulated by landlords.

Even the predominant forms of settlement reflect — to some extent — the different interest in the common land as indicated before: The farmers' valley community of Fiemme only released relatively small parts of the common land for the establishment of new settlements. The further development of these settlement forms thereby received its characteristic stamp. The surrounding land of these new settlements still had the legal status of common property. Therefore the later growth of such settlements could not lead to scattered

<sup>7</sup> Highly impressive evidence — among other examples — for this is the existence of the Alpine 'Schwaighofe' which are mainly distributed over Tirol (see Stolz 1930). They were planned as livestock farms and layed out by the initiators in altitudes above the zone of arable (corn growing) land.

<sup>8</sup> See the map in Becker (1975a).



forms but to a quick development of dense settlements within the limited areas, namely to the forms of villages and larger hamlets.<sup>9</sup> The landlords, however, who were not primarily interested in preserving the common land (for the use of the community), followed quite different considerations when planning an expansion of settlement. They would be inclined to aim at a total expansion on the then unsettled areas, to found farms of a highly productive value which were suited to make the payments imposed on them. From this group-specific conception there resulted a wide-spread pattern of single farmsteads (particularly in the mountain areas). In cases where later divisions of farms took place this process led to the form of scattered settlements.

The upper middle class citizens, too, were led by the idea of rational planning and profit considerations when they changed the cultural landscape that surrounded the Italian cities. Their efforts resulted in semi-tenant farms of family size. They were sometimes layed out in the form of single farmsteads. We know from similar cases in Central Italy that older villages were even dissolved and replaced by single farmsteads.

The least known type is the settlement expansion undertaken by a peasant population and tolerated by the feudal landlords. The investigations made by Timmermann offer only some first information as to the economic aspects of the development of these farms. Since the landlord (in this case the Monastery of Tegernsee) requested as payment a supply of butter and cheese, livestock farming was particularly encouraged whereas — also according to Timmermann — grain-growing was reduced.

It has been my main concern in delivering this report to emphasize the diverse forms of settlement expansion processes in the Eastern Alps and make a first attempt to systematize the different types. Of course this first attempt will have to be complemented, and possibly modified, by further investigations. And it goes without saying that also the exceptional position of the different types of settlement processes in the social geography of the Middle Ages calls for further, intensive treatment.

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<sup>9</sup> Some foundations of the High Middle Ages in Fiemme consequently are today large nucleated villages (e.g., Predazzo).



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## SOME OBSERVATIONS ON THE FIELD SYSTEMS OF MEDIEVAL IRELAND

ROBIN A. BUTLIN

### INTRODUCTION

Analyses and interpretations of the evidence for the economic systems of rural areas in times past are almost inevitably influenced by prevailing contemporary ideas on the nature of rural systems or mental models of those systems. Thus, prior to the stimulating debate, begun in the 1960's and influenced by work in Germany, by Joan Thirsk and others<sup>1</sup> on the origins and development of English open fields and field systems, most work on the subject related to the ideas of H. L. Gray,<sup>2</sup> the Orwins,<sup>3</sup> and earlier writers. During the last twenty years, however, a careful re-examination of known evidence and a search for new evidence have both resulted from and influenced this debate, and have led to new, though tentative, explanatory generalizations about open and common field origins and development being put forward.<sup>4</sup>

This debate on field systems evolution has not, for some reason, led to any significant re-interpretation or even new predictive generalizations about the evolution of field systems in Ireland, and the most recent exposition on the subject<sup>5</sup> has largely followed traditional lines by contrasting 'native' *rundale* or *infield* systems with the conceived three-field or multiple field systems generally associated with the medieval Norman colonizers. This exposition favours, as does Estyn Evans,<sup>6</sup> a strong continuity of *rundale* going back into pre-history. Another treatise on the subject, by Otway-Ruthven, refers to an 'Anglo-Iran' system of cultivation associated with the Norman settlers, characterized in the south-east of the country by 'a three-course rotation of the type common in England ... the areas under each were approximately equal, though there were not necessarily only three fields',<sup>7</sup> the evidence cited deriving from the early fourteenth century. The same commentator at a later date stated that the agricultural structure of the new Norman manors 'was clearly modelled

<sup>1</sup> Joan Thirsk, *The common fields, Past and Present*, 29, 1964, pp. 3-25; The origin of the common fields, *Past and Present*, 33, 1966, pp. 142-7; J. Z. Titow, *Medieval England and the open-field system, Past and Present*, 32, 1966, pp. 86-102.

<sup>2</sup> H. L. Gray, *English field systems*, 1915.

<sup>3</sup> C. S. and C. S. Orwin, *The open fields*, 1938.

<sup>4</sup> See, for example, A. R. H. Baker and R. A. Butlin (eds.), *Studies of field systems in the British Isles*, 1973; R. A. Dodgshon, *The landholding foundations of the open field system, Past and Present*, 67, 1975, pp. 3-29.

<sup>5</sup> R. H. Buchanan, *Field systems of Ireland*, in: Baker and Butlin, *op. cit.*, pp. 580-618.

<sup>6</sup> E. Estyn Evans, *The personality of Ireland*, 1973, p. 61.

<sup>7</sup> J. Otway-Ruthven, *The organisation of Anglo-Irish agriculture in the Middle Ages, Jnl. Roy. Soc. Antiqu. of Ireland*, LXXXI, 1951, p. 3.

on English practice. The *betaghs* no doubt cultivated their own lands on the native system, but there is adequate evidence of the dispersed strip holdings of the English open field system all over the area,<sup>8</sup> but no definition is given of either 'the native system' or what exactly was conceived as 'the English open field system'. Both the interpretations cited derive a great deal from analogy — the first from the long-held idea that nineteenth-century and earlier arable systems were similar to those of Scotland (hence the adoption of the non-Irish term *rundale*) and the second from analogy with an English 'system' which is now in dispute. Some earlier interpretations were influenced by Seebohm's analysis of nineteenth century Irish evidence to demonstrate analogy between Irish field systems of the nineteenth century and those of the medieval *betaghs*.<sup>9</sup>

As the general paradigm in which field systems study has been located is now changing, it would seem apposite and timely to venture some different ideas on the subject. It seems fairly clear, for example, that interpretations to-date of Irish agrarian arrangements have over-stressed both the element of continuity in field systems and settlement, perhaps in ignorance of the principle of equifinality and an over-emphasis on morphological analysis, and also the 'ethnic' contrasts between 'alien' and 'native' systems — something which continental scholars drew attention to fifteen years ago<sup>10</sup> and which a new generation of Irish historians have again stressed.<sup>11</sup> Hard facts for the medieval period are, admittedly, difficult to come by, but on the basis of a certain amount of *a priori* reasoning and the use of available evidence, it should be possible to assert that in medieval Ireland field systems varied spatially and temporally, and that morphologically and functionally they do not readily betray 'ethnic' origins, rather are they a reflection of the variations through time of the many and complex physical, social, and economic inputs into the land-use systems.

In reality, therefore, it would seem appropriate to test, albeit in a highly subjective fashion, an 'evolutionary' model of field system evolution to medieval Ireland, which treats field systems in terms of slow development through a process of gradual expansion (countered in some cases by phases of contraction or total abandonment) of the arable area in favoured regions by processes of colonization and asserting, leading possibly, in some regions of favoured environment and high population density, to something vaguely akin to the 'model' multiple field system traditionally — if erroneously — associated with Midland England. Negative environmental and demographic constraints characteristic of medieval Ireland may indicate, however, that a 'steady-state' equilibrium model may be more appropriate.

#### LATE MEDIEVAL SYSTEMS

Within the rural areas of Ireland in the sixteenth century there are apparent contrasts between open and enclosed land, and the general impression given in contemporary descriptions is one of few enclosures, except for some of the longer-settled areas of the south and east, like Wexford and Kilkenny, and the environs of the larger cities. In 1585 it was asserted that 'in verie few

<sup>8</sup> J. Otway-Ruthven, *A history of medieval Ireland*, 1968, p. 117.

<sup>9</sup> F. Seebohm, *The English village community*, 1883, p. 228.

<sup>10</sup> H. Uhlig, Old hamlets with infield and outfield systems in Western and Central Europe, *Geografiska Annaler*, 1961, p. 292, n. 43.

<sup>11</sup> K. Nicholls, *Gaelic and Gaelicised Ireland in the Middle Ages*, 1972, pp. 3-4.



places of Ireland have they enclosures',<sup>12</sup> elsewhere Tipperary was described as a 'fair champion way',<sup>13</sup> and the Inishowen peninsula in the north, 'after the fashion of the country, lies all open, without any manner enclosures'.<sup>14</sup> One of the obvious problems deriving from such descriptions, mainly by English observers, is that the openness of the Irish landscape may have been to some extent misleading, for in some of the lowland areas fields were undoubtedly demarcated and enclosed by unobtrusive features such as low banks, shallow ditches, stones and wattle fences, although many of these were temporary enclosures to keep livestock from the growing crops. That 'open' fields existed is beyond doubt, but their exact form and management is difficult to establish. Differences in the scale of arable cultivation undoubtedly existed, being influenced both by geographical and social factors. Crops were grown on ridges, and 'riggs' of arable land appear on pictorial sketches and in land descriptions in the Elizabethan *fiants*. The small upland arable plots were cultivated by spade, and the lowland fields by means of ploughs pulled by teams of horses. The crops grown in them varied, with oats being the predominant crop, particularly in the north and west, and wheat was ubiquitously grown, albeit on a small scale, but was more important in the south-east and east.<sup>15</sup> That common rotations were practised is indicated by the term 'the custom of the country', used in respect of rotation and manuring, and tenants were obliged, it would seem, to follow customary practices of rotation.<sup>16</sup>

Several other important features of rural society and economy, pertinent to this discussion, can be mentioned. These include the dynamic nature and complexity of tenurial systems, the generally low density of population in rural areas, and the devastating effect of almost continuous warfare in the sixteenth century. The complexity of tenurial systems is everywhere apparent. A crude distinction has been made between Gaelic and Norman modes of tenure, some of which in practice and effect were very similar. One of the characteristics of the 'Gaelic' regions was the periodic redistribution of land under the systems of both partible and collective inheritance, a direct consequence of the fact that 'the unit of proprietorship was not the individual as such but the family group viewed as a corporation',<sup>17</sup> which may have hindered or prevented the consolidation of holdings and encouraged the retention of subdivided unenclosed fields. The mechanisms for the division of lands into shares varied widely, from the strictly objective to the strongly nepotistic, the latter characteristic of parts of Munster and Ulster where the chief often retained the better land for himself. The dynamic effect of this system is significant for field systems study, for continued subdivisions over several generations could result in the fragmentation of a large property into very small holdings, a process usually followed by one of reconsolidation or mortgage in the hands of a single rich or powerful individual.<sup>18</sup> The cultivation of land could either be direct, with landowners using hired labourers or contracted tenants, the latter working on a rent or sharecropping basis with a third or quarter ('the fourth sheaf') of the crop being paid. Sharecropping was also common, though on less favourable

<sup>12</sup> Wallop, cited in: F. H. A. Aalen, Enclosures in Eastern Ireland, *Irish Geography*, V, 2, 1965, p. 32.

<sup>13</sup> *Cal. Carew Mss, 1589-1600*, p. 306.

<sup>14</sup> *Cal. S. P. Ireland, 1600-01*, p. 94.

<sup>15</sup> Nicholls, *op. cit.*, p. 115.

<sup>16</sup> *Ibid.* p. 116.

<sup>17</sup> *Ibid.* p. 59.

<sup>18</sup> R. A. Butlin, Land and people, c. 1600, being chapter V of volume III of T. W. Moody, F. X. Martin and F. J. Byrne (eds.), *A new history of Ireland*, 1976, p. 154.

terms to the tenant, in the gaelicised and border Anglo-Norman areas, though a system of farming for fixed rents for a term of years also existed. The tenants under both systems could be individuals or groups. In the 'core' area of the Pale large farms were common, though subject to complex sub-letting systems, and it is clear that in some areas different forms of tenancy could exist on the same estate.<sup>19</sup> The possible number of permutations of such tenurial systems in a given area must have been quite large, and to speak of ethnically-based field or tenurial systems in late-medieval Ireland is to deny the complexity of tenurial and cultivation systems which, although derived from different legal systems, could in practice be similar. One generalization which may emerge, however, is that many of the tenurial systems described were not conducive to cultivation or management 'in severalty', and in general terms, though in different ways, must have influenced the retention of open and in many cases common fields.

It would, of course, be wrong to overstress the contribution of arable land to Irish field systems and land-use systems generally, for the general emphasis of the Irish economy was pastoral and the intensity of land-use, with certain exceptions, was low. This can be viewed as not only a reflection of environmental influence — for many areas of Ireland were (and are) favourable to corn-growing — but also of the social significance of cattle, the immovability and vulnerability of growing crops to 'scorched-earth' actions by the military and the generally low density of population and the spatial and temporal variations (both domestic and international) in the market demand for cereal crops and their by-products. Each of these themes has been developed in detail elsewhere,<sup>20</sup> but the essential point to be made in this context of a low land-use intensity and low population density is the degree of flexibility which such conditions invariably bestow on land-use systems, resulting in some instances in the use of temporary fields or intakes of arable, under a kind of shifting/long fallow system which could and undoubtedly did, in favoured regions of the south midlands and east, lead to approximations to multiple large-field systems.<sup>21</sup>

#### ANTECEDENTS

Any attempt to investigate the nature of Irish field systems in the period from the twelfth to the fifteenth centuries inevitably encounters problems of documentation, and a fuller picture of the medieval Irish agrarian economy awaits further detailed study of the extant records of some of the larger estates.

Recent work on this period has — as indicated earlier — tended to pursue a somewhat outmoded analogy with an 'idealized' Midland English field system. A recently-completed study of Ireland c. 1300 suggests that 'In both Gaelic and Norman areas land was worked under a common field system. In the east, the Normans had introduced an open-field system similar to, but never as rigid as, that of the English Midlands',<sup>22</sup> and that the Irish *betaghs* 'held land in common and worked it on an infield-outfield arrangement similar to that of the later rundale system',<sup>23</sup> a statement more flexible than Otway-Ruthven's assertion that 'any collection of medieval Anglo-Irish Charters will show

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

<sup>21</sup> I. Leister, *Das Werden der Agrarlandschaft in der Grafschaft Tipperary*, 1963.

<sup>22</sup> R. E. Glasscock, *Land and people, c. 1300*, in: Moody, Martin, and Byrne, *op. cit.* vol. II

<sup>23</sup> *Ibid.*



on examination clear traces of a system of cultivation exactly similar to that which existed in the greater part of England, and indeed, in north-western Europe as a whole'.<sup>24</sup> However, several basic problems emerge from such interpretations. The most obvious is the assumption or strong implication that the Norman settlers who came to Ireland in the twelfth century and after had, as part of their socio-economic baggage, a prefabricated 'portmanteau' field system, presumably developed elsewhere, though the evidence from the 'elsewhere' from which many of them came — namely South Wales — indicates a complex variety of settlement and field systems.<sup>25</sup> Another difficulty arises from the fact that no attempt is made to link so-called Norman field systems with those which preceded them, for it seems clear (though hardly ever stated) that those areas of Ireland which experienced the most intensive Norman settlement had been settled long before, and had some kinds of field system already developed. A further feature which has been insufficiently stressed is the dynamic or changing nature not only of the visible morphological features of the medieval landscape, but also of the social, tenurial and economic factors or systems by which they were influenced. The population trends of medieval Ireland appear, from the few statements that have been made on the subject, to have mirrored the general increase characteristic of Western Europe in the twelfth and thirteenth centuries, but the population size and density of Ireland remained comparatively low, with the total estimated variously between 500,000 and 1,250,000, the latter being more probable.<sup>26</sup> It is clear, however, that rural Ireland experienced no form of land hunger before the Black Death, and there is evidence of some labour shortage. In areas of above average population increase — effected by natural increase and immigration — there is, however, evidence of expansion of the cultivated area. It appears that during the thirteenth century 'a considerable amount of land was brought under the plough and improved agricultural methods were introduced with a consequent expansion in the production of cereals, so that by the middle of the century a large surplus was available for export'.<sup>27</sup> During this period, there was direct cultivation of the manorial demesnes on many large estates, whose size was increased by purchase of small parcels of land, by asserting, and by renting additional land.<sup>28</sup> The demesnes were cultivated by hired labourers and unfree estate servants, but the labour services of the latter were not as arduous as those experienced in England, and they were less important in this capacity than the hired labourers. The Irish unfree tenants or *betaghs* figure prominently in the estate accounts, and in addition to the demesne land they also worked their own arable lands, though it is difficult to accept the 'run-rig' or 'in-field-outfield' connotation given to this arrangement. The land of the *betaghs* was undoubtedly, in many instances, occupied in common with their individual lots scattered: thus, 'On the manor of Callan in 1307 we find five *betagh* groups, each having its particular fields which its members occupy in common. At Newcastle, the land of the 'betagil' is scattered in more than 20 lots. On the manor of Youghal there are 44 *betaghs* who are the survivors of 5 *septs* and their lands lie in 15 different places'.<sup>29</sup> If, as has been asserted, the demesne

<sup>24</sup> Otway-Ruthven, *op. cit.*, (1951), p. 2.

<sup>25</sup> Margaret Davies, *Field systems of South Wales*, in: Baker and Butlin, *op. cit.*, pp. 480–529.

<sup>26</sup> R. E. Glasscock, *op. cit.*

<sup>27</sup> K. Down, *Economic and social history of the Colony*, in vol. II of Moody, Martin and Byrne, *op. cit.*

<sup>28</sup> *Ibid.*

<sup>29</sup> E. Curtis, *Rental of the Manor of Lisronagh, 1333, and notes on 'Betagh' tenure in medieval Ireland*, *Proc. R. Irish. Acad.* XLIII, 1935–38, p. 69.



land or farm in a manorial area was normally separate from that of the tenants,<sup>30</sup> a question arises as to the location and form of the arable land of the free tenants and non-Irish unfree tenants. The extant records suggest that 'the holdings of humbler folk...show quite clearly the existence of scattered holdings, consisting of many small strips in a number of different fields, which are to be found all over south-eastern Ireland'.<sup>31</sup> This being the case, together with the evidence for a multiplicity of named arable units — perhaps more akin to 'furlongs' rather than large fields, a picture emerges of a core area of demesne arable, sometimes open, sometimes not (or possibly both) surrounded by an irregular constellation of small arable units, cultivated by lesser free tenants and various classes of unfree tenants, all located in a 'sea' of common pasture and waste. A similar arrangement might well have characterized the more populous so-called Gaelic areas where, although the formal system of land tenure and inheritance were different, the land of a powerful chief or lord might well be regarded as a kind of demesne and the land of the subordinates resembling that of their 'Norman' equivalents. In the remote areas, notably of the West and North, arable fields were probably small, but small arable fields were also characteristic of the many 'rural boroughs' — mere hamlets or villages with borough charters, many of which have long since disappeared.<sup>32</sup> If, therefore, to this two-dimensional picture of spatial complexity in field systems at local and regional levels, one adds the further complication of temporal trends in the period of the fourteenth century — which involved the decline of the influence of the Norman colony, the desecration of population in many regions by plague (in 1349, 1361, 1383-4, 1392-3, 1397-8, 1401, 1406, 1408, 1446 and 1488-9),<sup>33</sup> famine and warfare and the consequences of labour shortage and the farming of demesnes, to name but the most obvious — and beyond, the conclusion is inescapable that the 'native/betagh/rundale' and 'Norman three field' models have to be relegated to the realms of mythology. The detailed regional and local investigations which are so badly needed for medieval Ireland will almost certainly indicate a higher complexity of field-system and settlement system than ever imagined, with similarities or dissimilarities associated not with 'ethnic' origins but with social, economic, and environmental inputs. Such an arrangement has been anticipated in a recent stimulating (though unpublished) paper on 'the ethnic factor in Irish history', which asks if it is not reasonable 'to visualize each small group of farmers making its own uniquely individual adjustment to local circumstances? To postulate as many field systems as there are villages may look like a *reductio ad absurdum*, but at least one eminent English historian (Joan Thirsk) has treated it as a serious hypothesis.<sup>34</sup> Such an hypothesis, or a variant therefrom, coupled with a 'steady-state' model, might well be more productive for the study of the field systems of medieval Ireland than those which have gone before.

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<sup>30</sup> Otway-Ruthven, *op. cit.* (1968), p. 117.

<sup>31</sup> Otway-Ruthven, *op. cit.* (1951), p. 2.

<sup>32</sup> R. E. Glasscock, Moated sites, and deserted boroughs and villages: two neglected aspects of Anglo-Norman settlement in Ireland, in: N. Stephens and R. E. Glasscock (eds.), *Irish Geographical Studies*, 1970, pp. 162-177.

<sup>33</sup> K. W. Nicholls, in: Moody, Martin and Byrne, *op. cit.*, vol. II.

<sup>34</sup> J. H. Andrews, *The ethnic factor in Irish history*, unpublished paper given at the Conference of Irish Geographers, 1974.

## TWO SCANIAN TYPES OF TWO-FIELD SYSTEM

SVEN DAHL

The field systems of Skåne (Scania), the southernmost province of Sweden, were well mapped by Åke Campbell in his thesis of 1928 *Skånska bygder*. His principal sources were the excellent cadastral maps dating from the period 1670–1750. Since his time other sources have become more easily available. Among the more useful of these is the printed version of the *Landeboken*, an inventory of every arable and meadow strip belonging to the parish churches and *mensae pastorum* in the former archbishopric of Lund, which included Scania, Blekinge, Halland and Bornholm. This inventory was made in about 1570. Village bye-laws are also now known from many more Scanian villages than when Campbell wrote his book.

Campbell found three field systems in Scania, the *ensade* (one-field system), the *tvāsade* or *tvāskifte* (two-field system) and *tresade* or *treskifte* (three-field system). The terms *tvāsade* and *tresade* are to be preferred. The *tresade* was predominant on the fertile plain, the *ensade* in the rest of the archbishopric.

Here we shall confine our discussions to the *tvāsade*, to which comparatively little attention was paid by Campbell. It apparently escaped his notice that the *tvāsade* in the province is of two very distinct types. The most obvious difference between the two is that the system employed east of Landskrona involved a biennial periodicity with a change of crops every year, while that south of Lake Vomb involved a quadrennial periodicity with alternation between the fields only every second year. There is also a very marked difference in natural conditions. The first of the two *tvāsade* areas is primarily a chalky boulder clay area, while the second (the quadrennial) has very sandy soil, easily eroded by the wind: thus rich heavy soils in contrast to light meagre ones. The former had probably already lost all its forests in early mediaeval times. The latter had considerable resources of hardwood trees and bushes, especially in the meadows but also in between arable furlongs.

As regards grain crops, too, the difference is fundamental. The biennial *clayey tvāsade* area east to Landskrona was a barley area, the barley being sown in late spring. When autumn sown rye was grown in that area it had to be in a small *ensade* field (a field protected from grazing animals during every summer.) There are even isolated reports of enclosures in the grazing field itself, which also made it possible to grow autumn-sown rye. But on the whole this type of *tvāsade* is very well characterized by the *Landeboken* in a passage dealing with the village of Torrlösa in Onsjö county. *Och er ther ingen Rugjordtt fordj wy haffue icke wden thuo wonge*. ('There is no rye grown here, because we have only two fields'), i.e. the grazing fallow field and the barley field, the latter being protected from grazing animals only from late spring. On the Scanian boulder clays only rye sown in the late autumn could be grown. (In northern Scania, on less chalky soils, only spring rye, sown in early



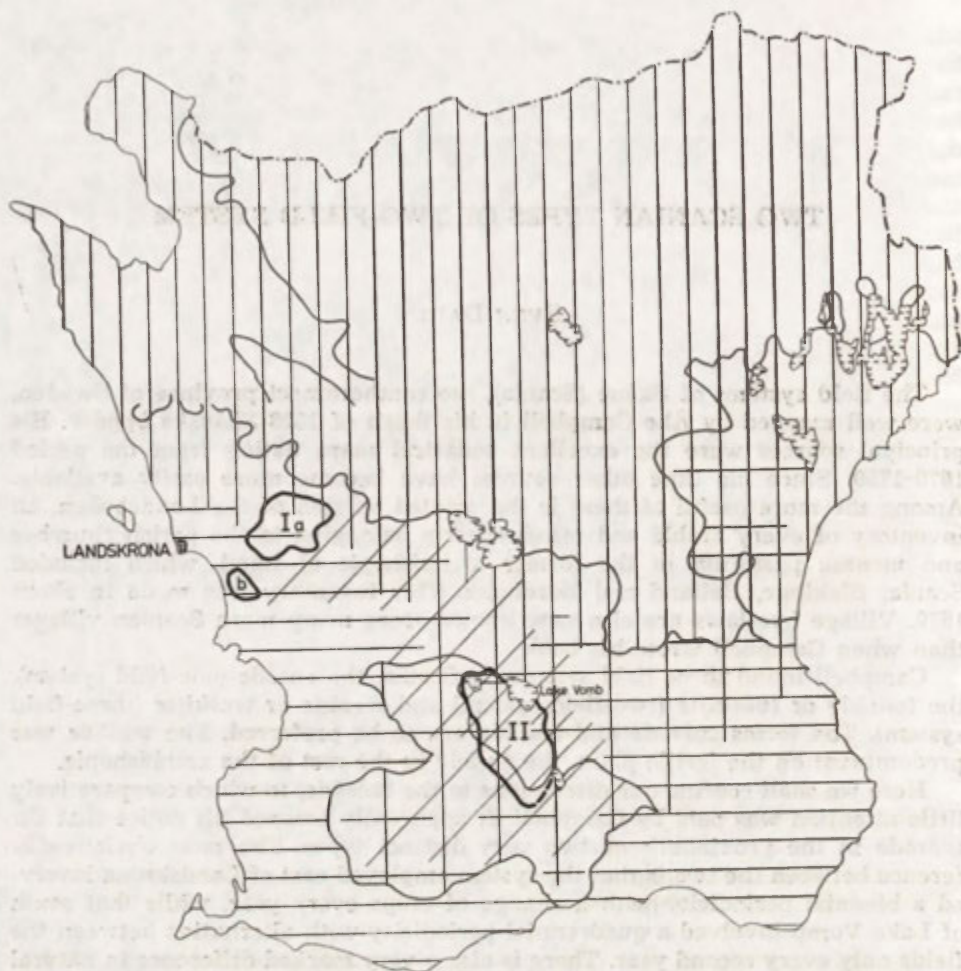


Fig. 1. The field systems of Skåne, according to Campbell

Vertical lines indicate the one-field system (*ensåde*) area, diagonal lines the two-field system (*tvåsåde*) area, horizontal lines the three-field system (*tresåde*) area. Thin non-straight lines indicate the limits of areas with forested waste lands  
 Ia, Ib and II indicate the correct areas of *tvåsåde* according to the author. Ia is the biennial clayey *tvåsåde* area, Ib another small *tvåsåde* area about which the sources give insufficient information. II indicates the quadrennial sandy *tvåsåde* area

spring, was grown.) The above quotation thus means that because the field is open to grazing animals until late spring, these would cause serious damage to a rye crop sown the previous autumn. From harvest until late spring both fields were open to grazing animals.

The clayey *tvåsåde* seems to have existed in 16 to 20 villages in the 16th century. But a process of change had already begun and by the end of the 17th century was quite evident; *tvåsåde* was giving way to *tresåde*. By the time the great *enskiye* reform<sup>1</sup> revolutionized the Scanian plain at the beginning of

<sup>1</sup> See S. Dahl, Strip fields and enclosure in Sweden, *Scandinavian Econ. Hist. Rev.*, 1961.



the 19th century, the biennial *tväsäde* seems already to have disappeared completely, having been replaced by *tresäde* or *fysäde* (three- or four-field systems), which in their turn were eradicated through the *enskiye*.

The quadrennial sandy *tväsäde* area in south-central Scania was on the contrary a buckwheat-rye area with very little barley. The first year after the two grazing years was used primarily for spring-sown buckwheat and the second for autumn-sown rye. It seems as if in some furlongs autumn-rye was sown both years and this could have led one to suppose that the field had to be protected from grazing animals as early as the autumn before the first of the two years of grain-growing. The bye-law of 1718 for the village of Bläntarp in Torna county, however, states that fields should be fenced in as early as possible in the spring 'for the sake of the winter rye' (the autumn-sown rye). A large number of furlongs in a given field were sown only during every second or third two-year period of fencing-in of the field. This means two years of grain-growing and six (or ten) years of fallow, of which 4 (or 6) were grazed and 2 (or 4) were in the fenced field, the latter possibly being used for hay-harvesting and tethering. The quadrennial *tväsäde* covered an area of at least 15 contiguous villages. At the beginning of the 18th century their *tväsäde* was unchanged and probably in most cases survived until it disappeared with the realization of the *enskiye*.

Every year fenced meadow-fields were common in both areas. Admittedly, we are concluding to a certain degree *ex silentio* if we state that a specially fenced meadow field was an institution that was on the increase from about 1570 until the period of the cadastral maps, but it is difficult to avoid such a conclusion. A meadow-field in a *tväsäde* area meant a bigger hay harvest through the exclusion of grazing animals from meadows previously open to them every second, third or fourth year. A process of this kind would have meant a reform change *before* the 18th century and in a very conservative agricultural society.

Direct mention of *vångalag* in the two *tväsäde* areas is scanty. *Vångalag* in Scania meant that two or more neighbouring villages had arranged their fields in such a way that the village boundary needed no fencing because the fields on both sides had the same rhythm of being grazed and of being protected from grazing animals. Thus two, three or sometimes even seven or eight villages had their fallow-grazing fields combined into one big collective field where all their cattle were allowed to graze together every second or third year. *Vångalag* means a 'team of fields' or a 'field team of villages'.<sup>2</sup> The village maps from both *tväsäde* areas indicate through the pattern of their fences very well developed *vångalag* arrangements.

Our conclusion is that very dissimilar types of agriculture can be found behind a scientific notion such as *tväsäde*, meaning that two fields were alternately grazed and cultivated. We have not used the English term two-field system because many Scanian villages had two fields without having a two-field system. Very often the two fields had *ensäde*, one-field system, i.e. the two fields were used for alternately rye (sown in early spring) and barley (sown in late spring) and neither of them was used for grazing during the summer. Another common case is that one field constantly was an arable field, fenced in until autumn, and the other a meadow-field, which could be closed later and re-opened earlier to the cattle.

<sup>2</sup> For literature see S. Dahl, *Vångalag i Skåne*, Ymer 1968, and Frits Hastrup, *Ianske Vangelag i nordisk perspektiv*, *Kulturgeografi*, 114; cf. also A. Herald, *Der zollgebundene Anbau im Randgebiet des Fränkischen Gäulandes*, *Würzburger Geographische Arbeiten*, 201, 1965, pp. 28-29.

Campbell was the first to underline the differences between the two 17th century regions of Scania, *skogsbygden*, the forest zone, and *slätten*, the forestless zone coincident with the fertile plains of the province. During the 17th century civil servants changed the term *slätten* to *slättbygden* (the open country zone). The farmers were no doubt conscious of these two notions and used the above names for them. He also discusses the word *risbygden*, meaning the intermediate zone between the two. The word 'ris' meant coppice or scrub. The word was probably created by the civil servants who produced the cadastral maps of the first half of the 18th century. I have found no mention of the word before 1706. Campbell says on p. 16 in *Skanska bygder* that *tväsåde* belonged to *risbygden*. In this he was mistaken, because the biennial *tväsåde* was entirely in *slättbygden* and the quadrennial almost entirely in *skogsbygden*.

The biennial *tväsåde* area was situated not far from the Scanian west coast and Oresund. On the other side of Oresund, in a south-westerly direction from Copenhagen, another *tväsåde* area existed on the fertile plain between Copenhagen, Roskilde and Koge with the peculiar name 'Heden', the heath. According to the *Landebok* of 1567 for the bishopric of Roskilde a large number of villages then had a two-field system, with all probability of the same kind as the Scanian biennial one. According to Hastrup (*op. cit.*, p. 88) at least some of these villages changed to a three-field system during the 17th century. He expresses his astonishment at the existence of *tväsåde* on such excellent soils. He seems to have accepted Campbell's mistaken assumption that the biennial *tväsåde* was typical of the *risbygden*. The two *tväsåde* areas, the one east of Landskrona and the one south-west of Copenhagen, both had good chalky soils, but by the 17th century they must be regarded as fading relics of a formerly much more widely distributed two-field system, perhaps once predominant in all the fertile plains of Scania and Zealand.

One very important reason for the slow development in the three *tväsåde* regions mentioned was no doubt the *vångalag* system. In a *tväsåde* region the fence pattern was very much simpler than in a *tresåde* area and the total length of burdensome fences, built from dry bushes and branches or from earth, was much shorter. It was difficult, unpopular, and expensive for one village in a *tväsåde* grid to change to *tresåde*. The *tresåde*, however, made more rational use of arable land, so that a sequence between barley and rye was possible between the grazing fallow years. The 17th and 18th centuries saw the virtual disappearance of the biennial *tväsåde*. Soil conditions assisted the longer survival of the quadrennial *tväsåde*, but this too was on the retreat.

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## CHANGES IN THE AGRARIAN STRUCTURE AND THE VILLAGES OF SOUTHERN POLAND IN THE 19th AND 20th CENTURIES

MARIA DOBROWOLSKA

A great variety in the agrarian structure is a characteristic feature of Poland. Little Poland, which is the subject of my study, is an area of individual peasant farming, whereas state farms predominate in the western and northern parts of Poland and collective farms — in Greater Poland.

New patterns of ownership and settlement structure of the country have formed under the impact of the socialist system. At the same time, strangely enough, almost medieval settlement structures have also survived.

The particular subject of this study is southern Little Poland, i.e. Galicia, at the time of the partitions. I shall therefore try to reconstruct the typical features of the various forms of settlement and agrarian structures, as well as the processes associated with decay or permanence of landownership patterns in the course of the 19th and 20th centuries.

Conspicuous contrasts within the structure of landownership have always been characteristic of Little Poland. Royal demesnes and large feudal landed estates occupied most of the territory. These contrasts were still evident in the 19th century, when southern Little Poland was incorporated into the Austrian Empire. Large landed estates were a fundamental element in the agrarian structure of Galicia. They covered — after the enfranchisement of the peasants in 1848 — 80% of woodland, 10% of ploughland, 41% of meadows and 40% of pastures. Although the area under big landed estates was gradually shrinking due to parcelling, which was an activity speeded up by the competition with American corn, in the interwar period even after the agrarian reform they still covered 30–40% of land in former Galicia. Those estates occurred at the same time together with a great number of very small peasant holdings. After the enfranchisement there were 23% of farms under 1 ha, 44% of farms up to 5 ha, 23% of farms up to 10 ha, and only 8% of farms of more than 10 ha. Parcelling out of large landed estates in the capitalist period did not improve the faulty agrarian structure, since its range was limited by large areas under forest and vast entailed estates, not included in that process.

Economic backwardness of Galicia, caused on the one hand by the economic policy of Austria, which considered Galicia to be only a market for its industrial products, and on the other hand, by the fact that weak industrial development did not induce any migration to towns, brought about an extreme overpopulation of very small farms. Because of the low level of agriculture, primitive tools, and lack of fertilizers, the village became a typical example of proverbial Galician poverty, augmented by a high birthrate.<sup>1</sup> An enormous

<sup>1</sup> S. Szczepanowski, *Nędza Galicji w cyfrach i faktach* (Facts and figures concerning poverty of Galicia), Lwów 1884.



overpopulation was only partly reduced by emigration to overseas countries. In these conditions the pressure of population on common pastures, on forest areas, as well as on landlord's possessions was marked.

A mutual interdependence between the population pressure and the agrarian disintegration is a common phenomenon in European countries.<sup>2</sup> The quick rate of agrarian disintegration and of changes in the settlement pattern during the 19th and 20th centuries was even stronger in Galicia because of the unwritten, customary law of inheritance. The fragmentation of farms was not the only factor; since the enfranchisement the peasants obtained a right to bequeath freely their land. The rules of customary law were so strong that the hereditary successor even if he emigrated to town or abroad was bequeathed a part of land due to him.<sup>3</sup> These processes of the parcellation of grounds are

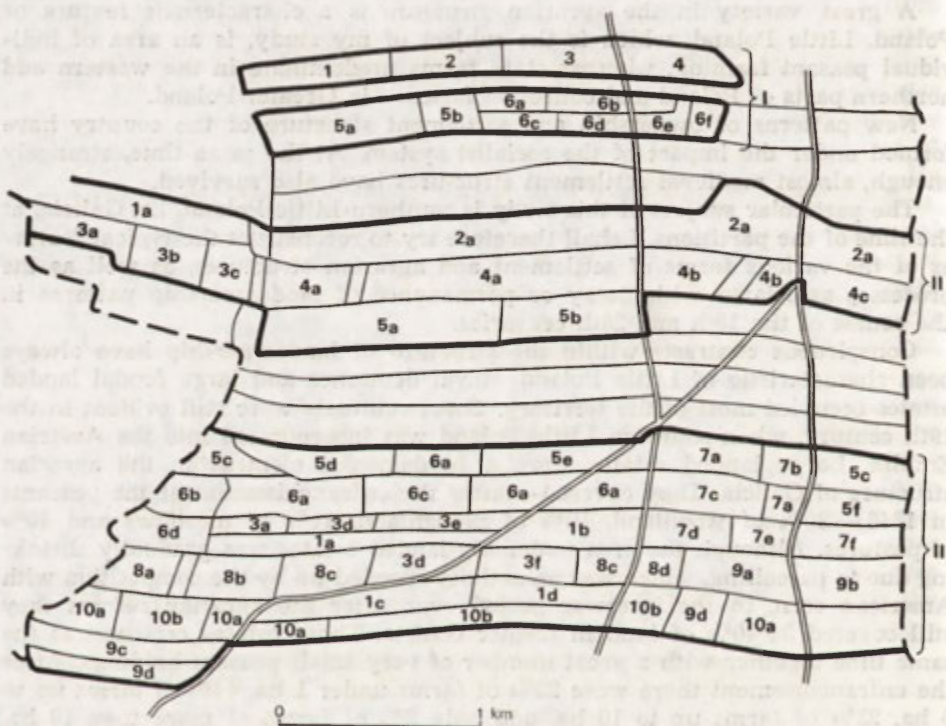


Fig. 1. Communion of land illustrated by chosen farms in Miękinia village near Kraków (according to J. Hawrylak)

- I. In 1881 farm No. I consisted of two parts (total area 5.04 ha); in 1908 — partition of this farm among six successors: 1, 2, 3, 4, 5, 6. During the interwar period farm No. 5 was split into 2 parts: a and b. Farm No. 6 was split into 6 parts: a, b, c, d, e, f
- II. In 1881 farm No. II consisted of two parts (total area 34.72 ha); partition of this farm in the years 1916–1923 among ten successors: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Later these farms were divided into 3–6 parts marked by letters a, b, c, d, e, f

<sup>2</sup> I have not taken into consideration the problem of man-land relationship presented by S. Helmfrid at the Perugia Symposium (1973). My interest is focused rather on the transformations of the agrarian pattern by the population structure.

<sup>3</sup> W. Styś, *Współczesność rozwoju rodziny chłopskiej i jej gospodarstw* (The correlation in the development of the peasant family and its farms), Wrocław 1959.

described not only in historical sources, they are also reflected in the variety of forms of fragmented plots, depending on the settlement type (Fig. 1).<sup>4</sup>

The typical feature of the agrarian pattern in southern Little Poland is a small holding of 1–3 ha, subdivided into strips, plots and pieces, which often amounted to as many as 30 and even more (on the river banks of the San and the Vistula sometimes over 80). That enormous disintegration of the farms and the patchwork pattern of fields present many difficulties for the national economy.

The separation of peasant and manor possessions, the parcellation of the manor land, the regulation of easements, as well as the drainage of swamps brought many new elements into the agrarian pattern. All these changes, the new and the old ones, have remained in the landscape of former Galicia. They are the relics of the historical past, since no agrarian reforms were introduced in that part of our country in the 19th century, though in German and Russian parts they were carried out at that time.

All these processes occurred in a situation when the infrastructure of agrarian systems was very diversified. They were different in agricultural villages of the open-field pattern, situated on large loess areas, in river valleys or mountain dales, or in 'Waldhufen' villages of Pogorze and of the Beskidy region with their combined corn-growing and cattle-breeding economy. They followed a different pattern in the forest areas of the Sandomierz Basin with its dispersed holdings, and in the pastoral villages of the high Beskidy region.<sup>5</sup> In consequence, the settlement and agrarian structures in the southern part of Little Poland became largely diversified in the course of the 19th century.

Some characteristic examples of that diversity can be selected from the area of the Sandomierz Forest with its many relics of backward economy. It is an area of spontaneous peasant settlement, prevailing in all historical periods, and facilitated by old rights of the villagers to use forests, pastures and meadows of the adjacent landed estates for grazing pigs, etc. Wood distillation and other related occupations made it necessary to plough deeply into the forest in which chaotically scattered, small fields and one-family homesteads grew quickly. This population often moved from one place to another and therefore traces of deserted fields have been discovered, for example, in the 17th century villages (Fig. 2). The return to these processes could still be observed in the second half of the 19th century, after a gradual regulation of easements; this was how the people responded to the threatened loss of their rights.<sup>6</sup> Increased spontaneous settlement in the forest was facilitated by lack of surveys, plans of settlements and fixed boundaries of farms, which in the forests were determined by traditional use, old records, incisions in the trees or landmarks. In the period of a hundred years following the publication of the original topographic maps, made by Mie $\acute{g}$ ,<sup>7</sup> over 60 new hamlets arose on the examined area of 15 villages.

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<sup>4</sup> M. Dobrowolska, *Badania nad geografią osiedli południowej Małopolski* (Studies of the settlement geography of Southern Little Poland), *Rocznik Nauk-Dydakt. WSP*, Kraków 1958.

<sup>5</sup> M. Dobrowolska, *Struktury osadnicze i ich regionalne zróżnicowanie* (Settlement structures and their regional differentiation), in: *Studia z zakresu socjologii, etnografii i historii ofiarowane K. Dobrowolskiemu*, Kraków 1972.

<sup>6</sup> M. Dobrowolska, *Osadnictwo w Puszczy Sandomierskiej między Wisłą i Sanem* (Settlement in Sandomierz Forests between the Vistula and the San), *Krakowskie Odczyty Geograficzne*, 14, Kraków 1931.

<sup>7</sup> Mie $\acute{g}$ , *Karte d. Königreichs Galizien und Lodomerien 1:28 800, 1779–82*, 413 K., MS. Kriegsarchiv, Wien.



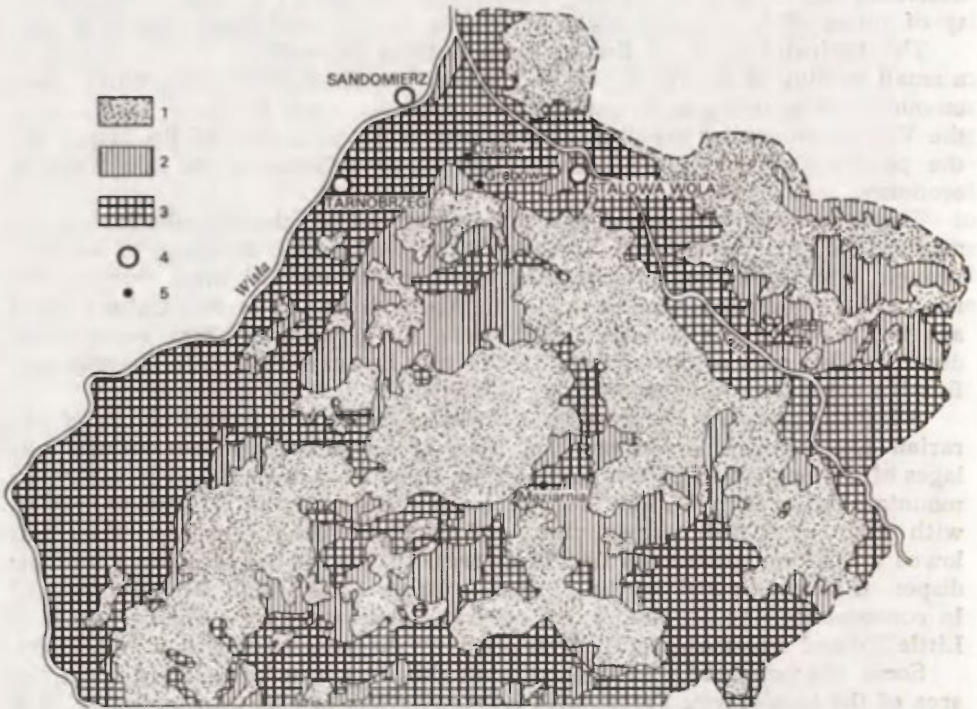


Fig. 2. The development of settlement in Sandomierz Forest since the 14th century  
 1 — area to-day forested, 2 — areas settled in 1779-1910, 3 — areas settled earlier (up to the end of the 14th century till the mid-18th century), 4 — present-day towns, 5 — villages mentioned in the paper

On the basis of these sources, completed by survey materials, the following categories of forest settlements can be differentiated according to their origin and development of their spatial patterns:

(a) spontaneously arising, one-family homesteads, connected with the exploitation of ore deposits, smithies, mills and forester's lodges, and later with the production of charcoal, tar or potash;

(b) hamlets belonging to unrelated settlers, which arose on forest clearings, glades and similar areas;

(c) chaotically developed villages of typical woodland structure, cleared between swamps on better soils, (e.g., villages of Grębów, Czajki, identified in my own field and historical investigations).

Even more variety was introduced in the landownership and settlement structures in the Sandomierz Forest, when at the time of the 'Josephine' colonization towards the end of 18th century several German villages were set up in the form of regular row-villages with a three-field pattern. At the beginning of the 19th century a visible progress of technology as well as certain elements of capitalist economy can be detected. An example is a big drainage of marsh meadows and swamps of the Dzików estates in the northern part of the Sandomierz Forest, accompanied by the establishment of a few street-villages with a three-field lay-out of grounds.

Radical changes in the settlement and agrarian structures were brought



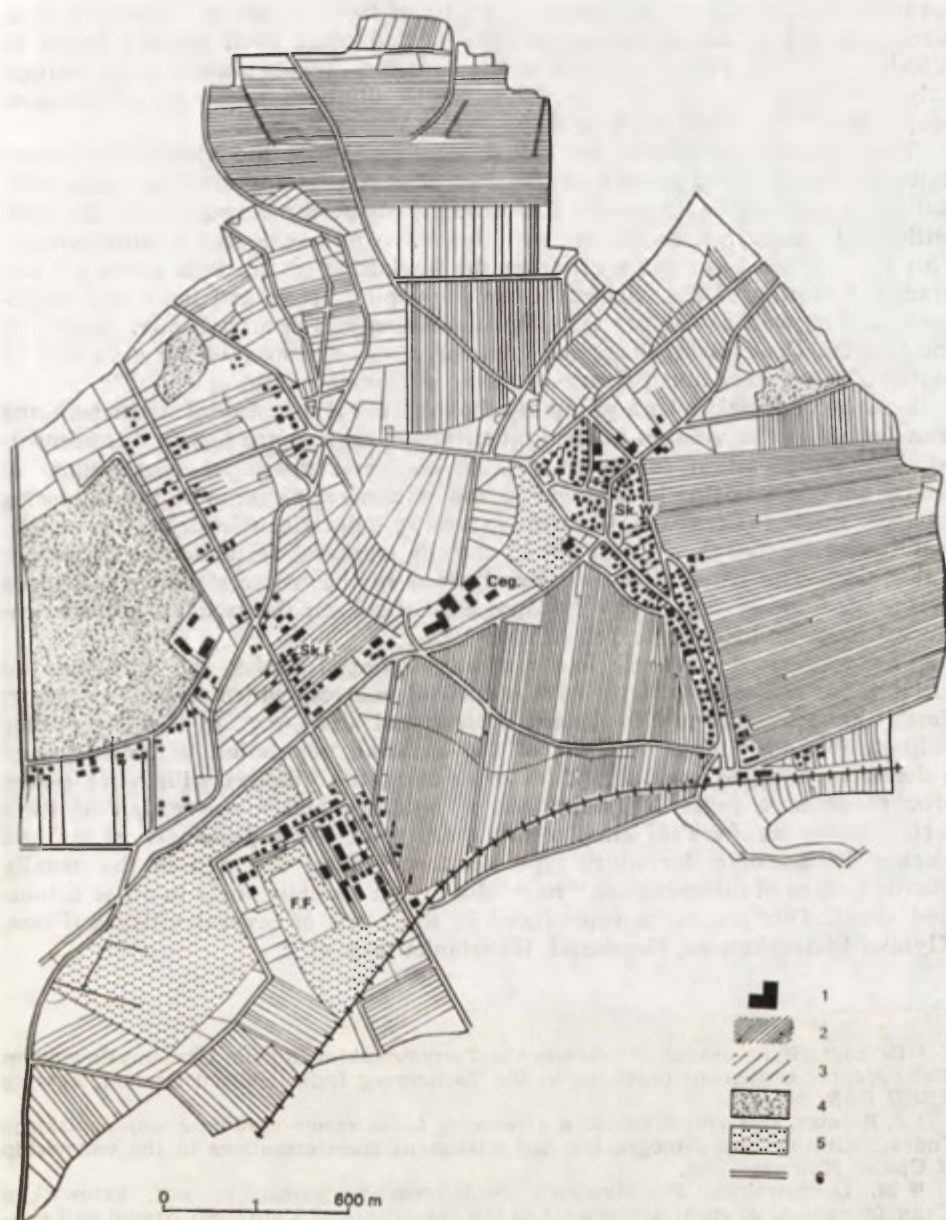


Fig. 3. Spatial pattern of the village Skopanie

SkW — Skopanie Wieś, SkF — Skopanie fabryczne, Ceg — brickyard, FF — curtain factory; 1 — buildings, 2 — field strips formed in the 19th century, 3 — parcelled plots, 4 — forests, 5 — pastures, 6 — roads

about by the great agrarian reform of 1944 and rapid industrialization in the socialist period. In the northern part of the Sandomierz Forest (i.e. in the sulphur region) 26 landed estates of 17,000 ha have disappeared and their 11,000 ha of woodland has been taken over by the State Forest Administration. In con-

sequence 5270 families were allotted 5300 ha of land. Farms not exceeding 2 ha were enlarged by the allocation of 3200 ha and other even smaller farms by 1300 ha.<sup>8</sup> However, this has lessened the agrarian overpopulation of the village only to a small extent. It did not, for example, eliminate migration of the rural people to the Regained Territories just after World War II.

The leading part played by industry in reshaping the village settlement patterns became even greater at the time of capitalist and socialist industrialization. Industrial development has brought about the formation of the new settlement structures, connected with intensive non-agricultural employment. This process has been going on from the beginning of the 19th century.<sup>9</sup> The gradual inclusion of the villages in the developing urban and industrial agglomerations as well as the urbanization of villages has occurred most rapidly in the Silesian Coal Basin. Stages of these processes are marked by a variety of patterns in workers and peasant-workers' settlements (Fig. 3).

Studies, undertaken by a group of scholars, reveal that the infrastructure and transformations of villages in the industrialized regions are highly differentiated. The stratification of new capitalist elements upon the foundations of feudal ones is reflected by changes in the settlement patterns of the following villages: mining (Brzeszcze, Golezów); mining-industrial (Grodziec, Jaworzno), and transport (Łazy), as well as of certain workers' settlements (Dębowiec, Kalembece). The patterns were reconstructed in the masters' theses, prepared by the students of the Higher Pedagogical School, on the basis of records, cadastral maps and field research in 1958-1967.<sup>10</sup>

The settlement network has radically changed under the influence of social industrialization. Many new industrial centres, which arose in a short time,<sup>11</sup> have transformed backward agricultural areas, e.g., in the Tarnobrzeg Sulphur Region.<sup>12</sup> Mass outflows of the agrarian population to industry and a dense network of transport lines connecting the villages with work-places brought about a rapid fragmentation of holdings and a conversion of their certain parts into building sites and workers plots. Many peasant-workers' and worker' houses of a dormitory type, scattered round the area in the usually chaotic groups of different age,<sup>13</sup> have also arisen spontaneously in other urbanized zones. This process is reproduced in the plans of several villages (Płaza, Kłyżów, Pietrzykowice, Korabniki, Kobylanka (Fig. 4).<sup>14</sup>

<sup>8</sup> Demograficzno-osadnicze problemy w Tarnobrzekim Rejonie Przemysławianym (Demographic-settlement problems in the Tarnobrzeg Industrialized Region), *Zeszyty KBRU PAN*, 29, 1968.

<sup>9</sup> J. Rajman, *Uprzemysłowienie a przemiany ludnościowo-osadnicze woj. opolskiego* (Industrialization and demographic and settlement transformations in the voivodship of Opole), Katowice 1965.

<sup>10</sup> M. Dobrowolska, *Przeobrażenia osadnictwa wiejskiego w woj. katowickim* (Transformations of rural settlements in the voivodship of Katowice), *Studia ncd ekonomiką regionu*, 3, Katowice 1972.

<sup>11</sup> S. Leszczycki, P. Eberhardt, S. Herman, *Aglomeracje miejsko-przemysłowe w Polsce 1966-2000* (Urban-industrial agglomerations in Poland 1966-2000), *Buletyn KPZK PAN*, 67, Warszawa 1971.

<sup>12</sup> Cf. footnote 8.

<sup>13</sup> M. Dobrowolska, A. Prochownikowa, *Urbanizacja wsi a przemiany układów osadniczych* (Urbanization of villages and transformations of settlement systems), *Folia Geogr.*, 4, Kraków 1971.

<sup>14</sup> A. Prochownikowa, *Zmiany w przestrzennych układach wsi jako wyraz przekształceń ich życia gospodarczego i społecznego* (Changes in the spatial transformations of villages as an aspect of changes in their economic and social life), *Folia Geogr.*, 3, Kraków 1970.

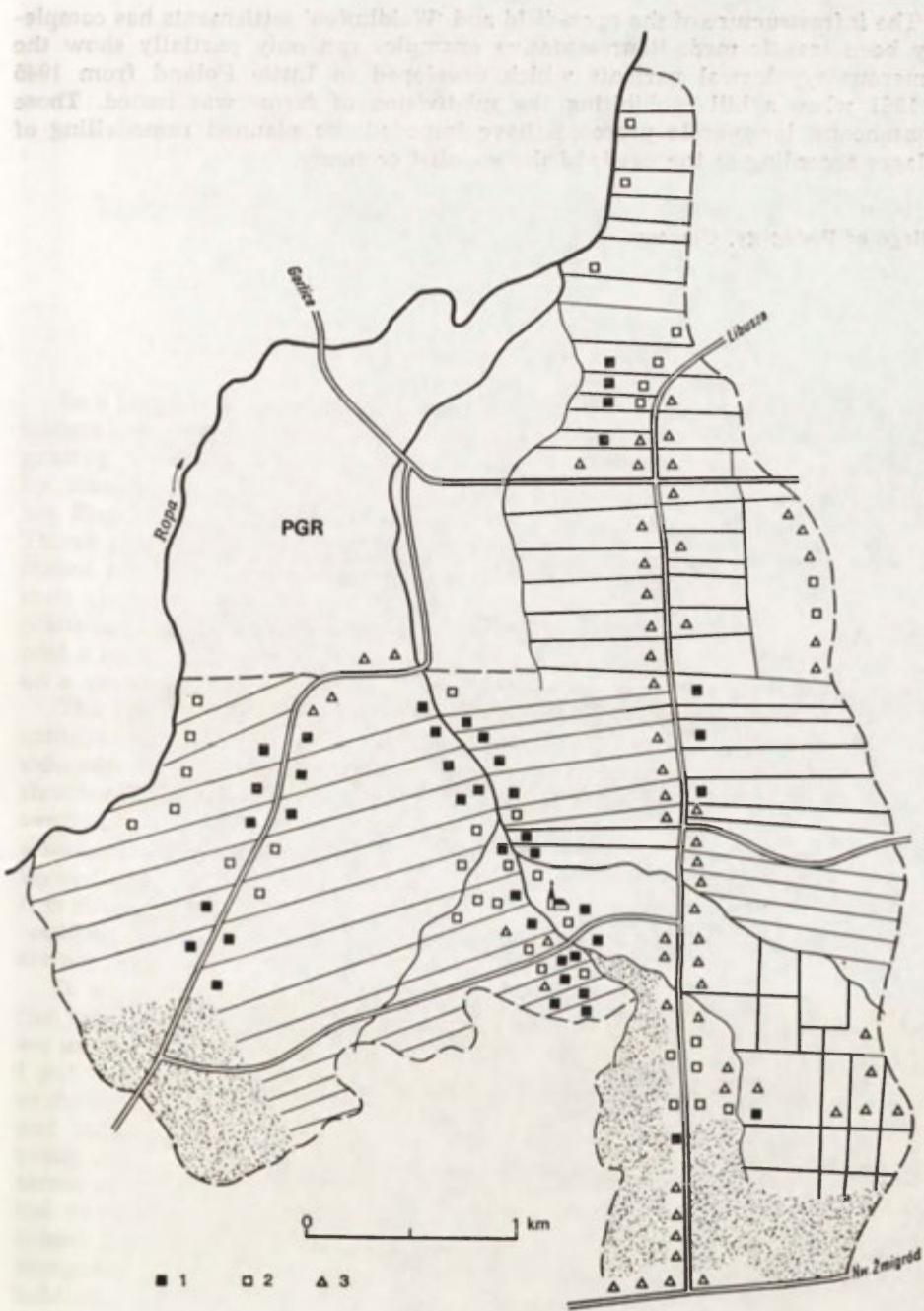


Fig. 4. Spatial pattern of the village Kobylanka (Nowy Sącz voivodship)  
1 — oldest buildings, 2 — buildings dating from the interwar period, 3 — post-war buildings  
PGR — State farm



The infrastructure of the open-field and 'Waldhufen' settlements has completely been transformed. Representative examples can only partially show the numerous typological variants which developed in Little Poland from 1945 to 1961 when a bill prohibiting the subdivision of farms was issued. Those spontaneous, large-scale processes have impeded the planned remodelling of villages according to the needs of the socialist economy.

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## THE ORIGIN OF THE TWO- AND THREE-FIELD SYSTEM IN ENGLAND: A NEW PERSPECTIVE

ROBERT A. DODGSHON

In a paper published in 1964, J. Thirsk argued that the common field system integrated four essential elements: the subdivision of fields, rights of common grazing over arable, common waste, and the regulation of cropping and grazing by means of a village assembly or manorial court. Contrary to those who see English field systems as having been born into a state of full maturity, Thirsk postulated that common fields acquired these characteristics at different stages rather than at one and the same time.<sup>1</sup> In effect, this is to say that each characteristic has a separate history and therefore needs a separate explanation. In the belief that this part of her paper is correct, I wish to present a new interpretation of why the cropping of certain English common fields on a two- or three-field basis developed.

The basis of this proposed re-interpretation lies in establishing the proper context in which the origin of the two- and three-field system ought to be considered: this can be done by comparing it with what might be called its related structures both in England and across the Border in Scotland. Within the conventional framework of thought regarding the nature of field systems, such a statement might be taken as arguing for a comparison between the two- and three-field system and other field systems, notably infield-outfield. However, it is fundamental to my thesis that whilst the two- and three-field and infield-outfield systems can be compared as types of communal cropping pattern, they are not necessarily what should be compared for they are not strictly equivalents.

If we wish to understand the relevance of infield-outfield to the growth of the two- and three-field system, it follows that we must first be certain that we grasp the essential nature of infield-outfield. In a paper published in 1973, I put forward proposals on what this essential nature might be in the light of evidence for south-east Scotland. Briefly, it was argued that the terms infield and outfield really denoted a distinction in the basis of landholding: infield being the assessed area of the township, or that part which was measured in terms of land units like husbandlands, and which formed the initial extent of the township *sensu stricto*, whilst outfield was a later extension into non-assessed land or the surrounding waste and which, as non-assessed land, was computed solely in acres. It was around this distinction in the basis of landholding, that infield-outfield as a cropping system developed. Being the initial growth area of the township, infield naturally emerged as an intensively cropped area receiving the bulk of available manure. The growth of outfield cultivation, meanwhile, can be explained by reference to the movement of stock and

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<sup>1</sup> J. Thirsk, *The Common fields, Past and Present*, 29, 1964, pp. 3-29.

the use made of their manure. Detailed descriptions of outfield cultivation in Scotland make it clear that the only manure which it received was that provided by the summer folding or tathing of stock on the break of outfield scheduled to be brought into cultivation the following spring. Herein lies the crux of the problem, for once in cultivation, this break was automatically excluded from further tathing during the one time of year when stock were available on the outfield for tathing. Logically, therefore, stock were moved to a new break, whilst the previously tathed break began a limited cropping sequence before awaiting its turn to be tathed again.<sup>2</sup>

The fore-going re-interpretation means that infield-outfield can be seen not only as a distinction between two types of cropping, but more importantly, as a distinction in the basis of landholding. In comparing it with equivalent structures in England, both sides of its character must be taken into account. Doing so, produces interesting results. Thus, one can identify English townships, especially in areas of 'all-pervading lordship' like the Midlands, whose assessed land occupied virtually all available land: in other words, no non-assessed land of any consequence existed. All the occupied land of the township was effectively 'infield'. Since there was no communally controlled outfield, and therefore no distinction to make between infield and outfield, one cannot be surprised to learn that the field systems of these townships were described in terms of the internal cropping organization of their assessed land, hence the term two- and three-field system. Of course, not all English townships consisted largely or entirely of assessed land. Thanks to the work of writers like R. H. Hilton, E. Miller, E. A. Kosminsky and others, it has been increasingly realized that many English townships had their nucleus of customary tenements or assessed land surrounded by a broad belt of non-assessed land. More so than in Scotland, this non-assessed land, lying outside the traditional bounds of the township and free from the restraints which bound the use of assessed or customary land, represented a break point in the territorial organization of the township. Some used this freedom to create pasture closes held in severalty on their non-assessed land, but other townships used it to create communally regulated outfield cropping systems.<sup>3</sup>

It cannot be stressed too heavily that although they manifested what we can call infield-outfield type structures — in the sense that they bore the distinction between assessed and non-assessed land as an imprint in their tenurial, landholding and cropping patterns — these last mentioned types of township commonly had two- and three-field systems developed on their assessed land or their 'infield'. In other words, a form of infield-outfield could embrace a two- and three-field system. This situation could arise because the terms infield-outfield and two- and three-field system relate to essentially different things: the former being a fundamental distinction between two parts of the township (assessed and non-assessed land) which could find expression in a number of different ways, whilst the latter was a term of narrower meaning, being simply a system of cropping that was commonly confined to one side of this distinction or assessed land. It follows that if we must compare the two- and three-field system with its equivalent in so-called infield-outfield areas like Scotland, then it should only be compared with infield not infield plus outfield.

<sup>2</sup> R. A. Dodgshon, *The Nature and development of infield-outfield in Scotland*, *Trans. Inst. Brit. Geogr.*, 59, 1973, pp. 1-23.

<sup>3</sup> A detailed discussion of these townships can be found in R. A. Dodgshon, *Infield-outfield and the territorial expansion of the English township*, *J. Hist. Geogr.*, 1, 1975, pp. 327-345.



How this alters our perspective can be seen by comparing the cropping pattern of infield with that of the two- and three-field system. Although a trite point, it is often forgotten that Scottish infield-oufield involved two different cropping regimes. The two- and three-field system of course comprised a single cropping regime. Failure to appreciate this difference is possibly the reason why some writers have felt able to characterize infield-outfield as a one-field system and thus, the natural precursor of the two- and three-field system. However, whilst infield is often spoken as if it were a single field unit, it must not be overlooked that most examples of infield in Scotland, where it is thought to have been more perfectly preserved in its primitive form, were subdivided into two or three breaks for the purpose of cropping. Since it is now being belatedly emphasized that the two- and three-field system was no more than a grouping of furlongs into two or three zones for the purpose of cropping, one might be forgiven for not appreciating the finer points of their dissimilarity.

Although it enlarges our understanding to compare the two- and three-field system with infield in this way, it could still be argued that it is not the aspect of Scottish field and township organization which the former should be compared with if we are to derive new perspectives on its origin from such a comparison. There is, in fact, a new dimension to the problem which we ought to consider. A widespread feature of the Scottish rural landscape is the clustering of farms into groups of two, three or even four. Closer inspection of the morphology and toponymy of these clusters suggests that they were once integral units which at some point have been split or divided. As well as lying together as a related group on the ground, they usually bear a common name, being distinguished from each other only by prefixes like East, West, Nether and Upper or affixes like Mor and Beg. For some writers these farm groups represent former runrig townships that were divided out into consolidated holdings during the Improving Movement which diffused through Scotland after 1750. However, as an interpretation of all split farms, this is unacceptable for the simple reason

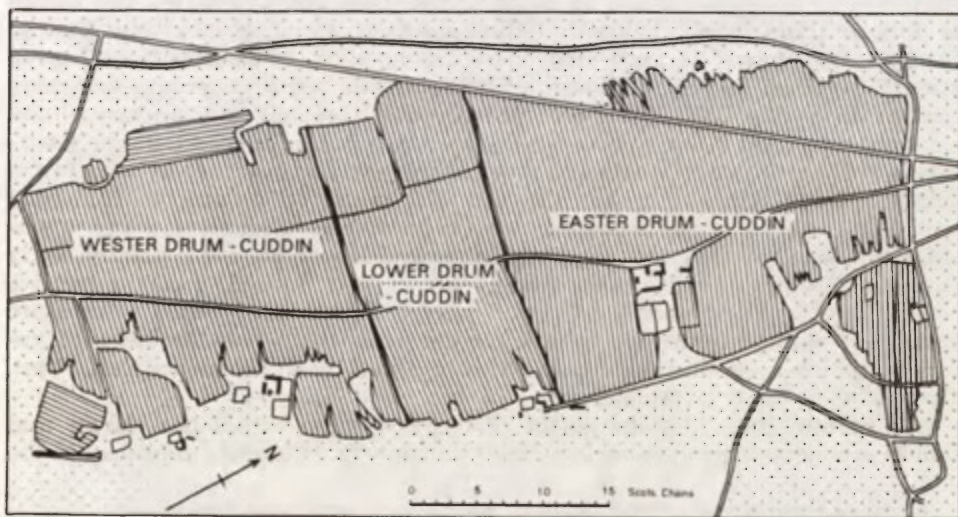


Fig. 1. Drumcuddin, Ross and Cromarty (1796). Based on Scottish Record Office (hereafter SRO), RHP 1469

Legend to Figs. 1-4: Line shading = arable; stipple = muir and common grazing; black = farm buildings; enclosed unshaded areas = farms or kail yards; trees = wooded areas

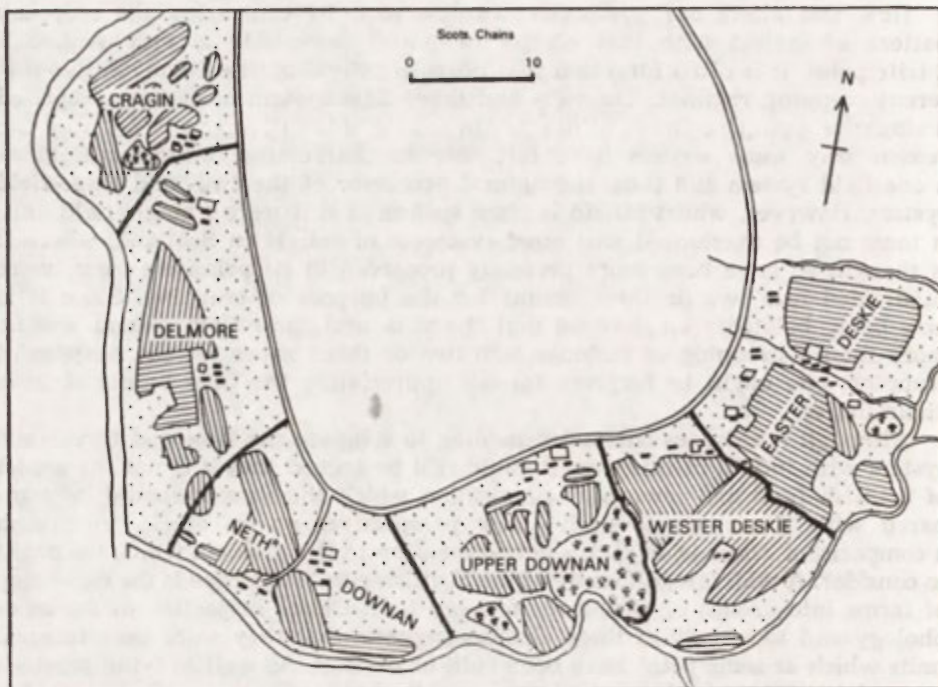


Fig. 2. Daugh of Deskie, Banffshire (1761). Based on SRO, RHP 2487

that many of them predate the activities of the Improvers. This can be confirmed by reference to a number of sources. Estate plans compiled before the Improvers had set to work, for instance, yield numerous examples. Figures 1-4, showing the township groups of Drumcuddin (Ross and Cromarty), the Daugh of Deskie (Banffshire), Tailliach (Aberdeenshire) and Lightney and Blairno (Angus), are typical: in each case, there are no signs of improvement having started, yet each has the character of being a split township group. Assuming that prefixes like East, West, etc., are diagnostic of splitting, an assumption strongly supported by early Scottish legal texts, it can be argued that early rentals provide even more conclusive proof of the early appearance of split townships: 16th and 17th century rentals, such as those for crown properties in Islay and Ettrick, or for the Gordon estate in Banffshire, document many townships divided into East and West or Nether and Upper portions. Finally, early land charters are equally forthcoming with support. Indeed, a comprehensive source like the Register of the Great Seal of Scotland can be used to measure their general importance: the volume for the period 1593-1608, for instance, refers to almost a 1000 farms or townships prefixed by the elements East, West, Over, Nether, Little or Meikle.

An investigation into the origin of these split townships has shown that some were being formed as early as the 12th century.<sup>4</sup> Charters published in the

<sup>4</sup> A fuller discussion of the evidence for Scottish split townships is contained in a paper provisionally entitled Changes in Scottish township organization during the medieval and early modern periods, *Geografiska Annaler*, 1977 (in print). One or two split townships are also referred to in R. A. Dodgshon, Scandinavian Solskifte and the sun-wise division of land in eastern Scotland, *Scottish Studies*, 19, 1975, pp. 7-12.



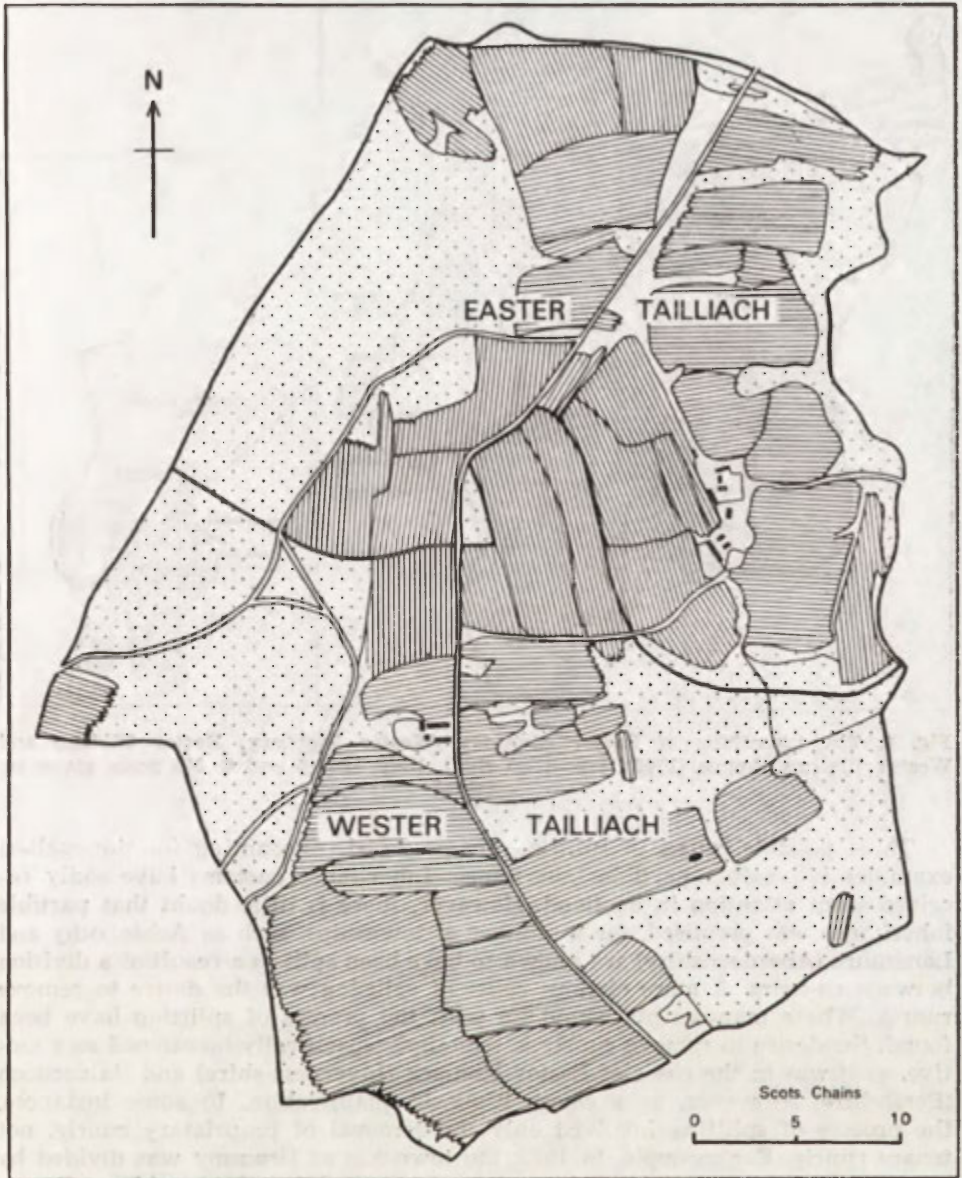


Fig. 3. Easter and Wester Tailliach, Aberdeenshire. Based on SRO, RHP 260/2

volumes of the *Regesta Regum Scottorum* edited by G. W. S. Barrow, for instance, evidence a number of seemingly split townships, such as *tribus Malgaskis* (Fife) or Great and Little Lumsdaine (Berwickshire), both of which were noted in this form in the 12th century. However, judging from the way in which their frequency increases in a continuous record series like the Register of the Great Seal, the majority would appear to date from the 15th, 16th and 17th centuries, a chronology of formation given some endorsement by rentals and by evidence connected with the actual process of splitting.



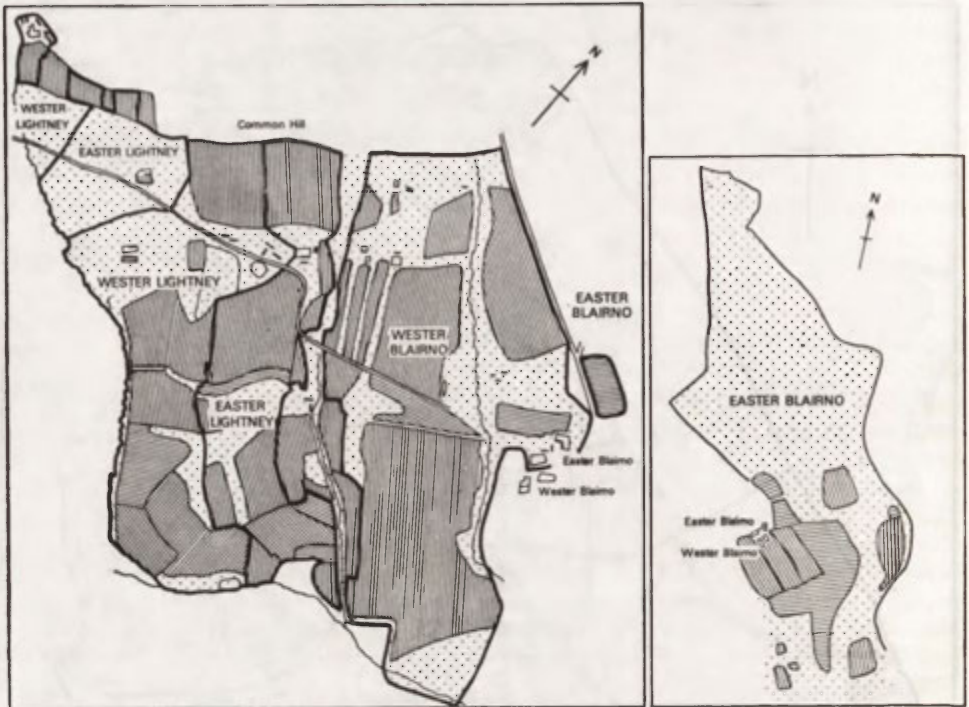


Fig. 4. The townships of Easter Lightney, Wester Lightney, Easter Blairno and Wester Blairno, Angus (1766). Based on SRO, RHP 1667/3 and 6. No scale given on original

Three possible causes of splitting are proposed. Accounting for the earliest examples is possibly partible inheritance. Inheritance customs have sadly received scant attention in Scotland. However, there is little doubt that partible inheritance was practised, for a number of townships, such as Achinbothy and Langmuir (Aberdeenshire) are known to have been split as a result of a division between co-heirs. A more obvious cause of splitting was the desire to remove runrig. Where manuscripts bound up with the process of splitting have been found, the desire to remove runrig is sometimes specifically mentioned as a motive, as it was in the cases of Easter Moniak (Inverness-shire) and Baldornoch (Perthshire). However, as a cause, it needs qualification. In some instances, the process of splitting involved only the removal of proprietary runrig, not tenant runrig. For example, in 1573, the township of Drummy was divided by its three feuars into three townships, thereafter called East, Mid and West Drummy. Each of these separate townships though, were subsequently held by their respective tenants as runrig townships. More enigmatic, but potentially more revealing, are the many townships whose splitting involved only one landowner, but which did not involve the removal of tenant runrig either, new but smaller tenant runrig townships being immediately re-created on the divided portions. The only plausible explanation for these was the desire to reduce the scale and complexity of townships. In other words, their scission was a solution to their growth problems.<sup>5</sup>

<sup>5</sup> Cf. footnote 4.

The splitting of townships in Scotland has its parallel in England. As long ago as 1889, F. W. Maitland remarked that if we look at a map of England, "very often we find two or more contiguous townships bearing the same name but distinguished from each other by what we can call their surname. Cases in which there are two such townships are in some parts of England so extremely common as to be the exception rather than the rule".<sup>6</sup> Maitland believed these settlement clusters to be the result of a process of 'sub-division and fission' operating during the centuries both before and after the making of Domesday book in 1086. The basis of his conclusion was simple. Domesday book records some townships as already split. However, it also records as single villas, settlements which appear split in later sources. Obviously, as a listing ostensibly of land-ownership not settlement, Domesday book's entries could be misleading on whether a split had already occurred or not. On balance though, Maitland seems to favour taking its entries at their face value by presuming that the splitting of some villas was still a matter of prospect not retrospect. As he so neatly phrased it, the Domesday "surveyors saw but one vill where we see two".<sup>7</sup>

Faced with the task of reconstituting "the villages and hundreds which the Norman clerks tore into shreds", H. C. Darby and his co-authors of the Domesday geographies of England have taken a more cautious approach to the problem. The view which they uphold is summarized by a statement made by Darby himself when discussing the evidence for Dorset settlement: "when two or more adjoining villages bear the same name, it is not always clear whether more than one existed in the eleventh century. There is no indication in the Domesday text that, say, the East Lulworth and West Lulworth of today existed as separate villages: the Domesday information about them is entered under only one name (Loloworde), though they may well have been separate in the eleventh century as they certainly were by the end of the thirteenth".<sup>8</sup> In his most recent discussion of the problem, Darby has re-affirmed the possibility that Domesday book might mislead if taken too literally, arguing that some "Domesday names covered more than one settlement. A number of these came to be represented in later times by groups of two or more adjoining places with distinguishing appellations such as Great or Little and East or West; and some of these subdivisions were already in existence by 1086".<sup>9</sup>

Although, as these comments by Darby imply, same degree of caution is necessary, it would be a mistake to be over-cautious and to assume that all or most so-called split townships were split by 1086 but are concealed as such by the brevity of Domesday book's reference to them. If all the evidence is taken into account, it favours a quite different emphasis. In short, it suggests that the majority, at least, of Domesday book's references to villas can be taken as a reliable guide on whether splitting had occurred or not by 1086. Apart from the arguments used by Maitland, other points lend support to this view.

A vital, but neglected, aspect of the problem is the question of cause. Why should townships have been split into two or three parts? Logically, if a plausible answer can be established to this question and if it can be seen to fit in with a chronology which straddles 1086, then it makes the interpretation of Domesday book less daunting as a source of error. In fact, as will be elaborated

<sup>6</sup> F. W. Maitland, The surnames of English villages, in: H. A. L. Fisher (ed.), *The collected papers of Frederic William Maitland*, Cambridge 1911, p. 89.

<sup>7</sup> F. W. Maitland, *Domesday book and beyond*, Cambridge 1897, p. 14.

<sup>8</sup> H. C. Darby and R. Weldon Finn (eds.), *The Domesday geography of south-west England*, Cambridge 1967, p. 72. See also pp. 8, 141-42 and 228-29.

<sup>9</sup> H. C. Darby (ed.), *A new historical geography of England*, Cambridge 1973, p. 44.



on later not only can a reasonable framework of explanation be offered for splitting but, equally important, it fits in with the chronology of splitting suggested by the literal analysis of settlement toponymy in sources like Domesday book, the Hundred Rolls of 1279 or the *Nomina Villarum* of 1316.

Reinforcing this point is the fact that the law made ample provision for the division of villis. A glance at the *Curia Regis Rolls* or the early law reports known as the Year Books bears this out in a post-Domesday context.<sup>10</sup> However, recourse to legal process may only have been necessary in select cases. For reasons discussed at length elsewhere, early open field tenure was such as to facilitate the silent re-organization of townships.<sup>11</sup> It may not have required detailed surveys. The supposed splitting of townships after 1086 therefore, need not be questionable for lack of explicit documentation.

Lastly, the establishment of a new vill was not a casual or informal affair. As Maitland and Sir Frederick Pollock once said, "the boundaries of the villis are matters of public law, not to be abolished by the lord of the soil, for in doing so he would disarrange the fiscal, administrative, and justiciary scheme of the hundred, the county, the kingdom, and might aggravate the burdens incumbent on their neighbours. The powers of making new villis without licence from above must cease as the centralization of government and justice becomes more perfect".<sup>12</sup> The relevance of this point is straightforward. Splitting could lead to either the creation of two hamlets within a single vill (= two Demi-villis or a vill *cum membris suis*) or to the creation of separate villis. Where it led to the latter, and where, on a straight reading of the evidence, it appears to have done so after 1086, we cannot so easily reverse this conclusion by assuming that the vill had been split in 1086 but that Domesday book had glossed over the fact, for too much hinged around the status of a vill for it to be ignored. Apart from the legal status, replete with its share of any hundredal obligations, a settlement which aspired to be a separate vill also had to satisfy a further point of definition which would appeal to the settlement geographer. The basis of the point is laid down for us by Bracton in his 13th century notebook on legal practice and judgement. Put in a few words, it is that a vill could only be created out of another vill if it acquired a degree of physical separateness in terms of its buildings.<sup>13</sup> Coupled with the fact that prefixes like East, West, etc. were part of the language of a division, it suggests that split townships were born out of a comprehensive re-organization which could hardly be taken lightly by local inhabitants. One further point of interest, if a new vill was created out of another complete with its 'cluster of edifices', then according to Bracton, a tenement in the new vill was adequately described if said to lie in either the new or the old vill. However, a tenement in 'the prior cluster of edifices', or the old vill, was only adequately described if this was specified.<sup>14</sup> This might not be relevant to Domesday book, but it certainly affects the con-

<sup>10</sup> *Curia Regis Rolls of the Reign of Henry III*, Vol. XIII. II to 14 Henry III (1227-1230), London 1959, pp. 30, 85 and 271-72; *Introduction to the Curia Regis Rolls* ed. C. T. Flower, Selden Society Publication, Vol. LXII (1944 for 1943), pp. 59, 192-94, 271, 362 and 428-29; *Year Books of Edward II*, Vol. XI, 5, Edward II A. D. 1311-1312, ed. W. C. Bolland, Selden Society Publication, Vol. 31, London 1915, pp. 125-29.

<sup>11</sup> R. A. Dodgshon, The landholding foundations of the open field system, *Past and Present*, 67, 1975, pp. 14-26.

<sup>12</sup> Sir Frederick Pollock and F. W. Maitland, *The history of English law*, I, Cambridge (2nd ed., 1952), p. 607.

<sup>13</sup> Henrici de Bracton, *De Legibus et Consuetudinibus*, ed. Sir Travers Twiss, III, London 1880, p. 395.

<sup>14</sup> *Ibid.*, p. 397.



veyances contemporary or posterior to it which likewise treat as one, vills which appear in subsequent evidence as split.

Establishing the plausibility of Domesday book as a source of evidence is important because it provides us with a *terminus post quem* for the splitting of the many townships which, on the strength of its evidence, still remained to be split. Used in conjunction with sources like the Hundred Rolls or the *Nomina Villarum*, it offers an opportunity for assigning a rough dating to the splitting of particular townships. A convenient illustration of the value of this approach can be gained from R. Skaife's edited transcripts of Yorkshire vill names in the so-called Kirkby's Inquest of the late 13th century, the Inquisitions of Knight's Fees of roughly similar dating and the *Nomina Villarum*, and his comparison of them with Domesday book and the modern map. Altogether, just over 80 split townships groups occur. Approximately, one-fourth existed in 1086. A further two-thirds appear to have come into being between 1086 and the early 14th century. The rest postdate the early 14th century.<sup>15</sup>

Although splitting appears to have been most prevalent during the 11th-14th centuries, it is possible to find later examples. In Northumberland, for instance, splitting had an overall chronology similar to that of Scotland. Because of the gap in the Domesday record, it cannot be determined whether split townships existed in the county by 1086.

As a re-organization of township layout, splitting could take two forms. In what appears to have been only a few cases, it was only partial in its effect: the settlement itself being split but its field system remaining common to both or each of the split portions. This is known to have been the case at Great and Little Chesterton (see Fig. 5). However, in the majority of cases, split townships involved the creation of two totally discrete townships or systems. Examples of this type are depicted by the plans for Stoke sub Hamdon in Somerset and Upper and Lower Heyford in Oxfordshire which are reproduced in Figs 6-8.

The suggestion implicit in the foregoing discussion, that splitting was carried out after 1086, as well as before, would carry no force of argument if it could not be shown that there were adequate reasons for splitting which fitted in with this chronology. Two specific causes are offered. The simplest is rooted in the proprietary subdivision of a township into two or more discrete estates. It has, of course, long been appreciated that estates and manors were undergoing proprietary subdivision during the medieval period, both before and after 1086. Usually, the problem is veiled under discussions regarding the link between vill and manor, for it is the splitting of one without the other which has contributed so much to their discordant geographies. As T. S. Aston concluded, the expansion of settlement, sales, mortgages, leases, rewards, inheritance, family arrangements, forfeiture have "all affected the nature of estates and villages... everywhere, if the process continued long enough; they led to the subdivision of the villages themselves".<sup>16</sup>

The break up of villages into discrete estates is not, in itself, sufficient to explain all split townships. Thus, it cannot explain the splitting of townships held by a single landowner. Fortunately, some Northumberland examples help us out of this dilemma. For example, during the division of Long Haughton into two parts in 1567, it was said in the surveyor's report that the "division was made in order that the tenants might enjoy greater convenience for the

<sup>15</sup> *Kirkby's Inquest, Inquisitions of Knights' Fees and The Nomina Villarum for Yorkshire*, ed. R. H. Skaife, Surtees Society, Vol. XLIX, 1867.

<sup>16</sup> T. Aston, *The Origins of the Manor in Britain*, pp. 11-35, in: W. E. Minchinton (ed.), *Essays in agrarian history*, I, Newton Abbot, 1968, p. 29.

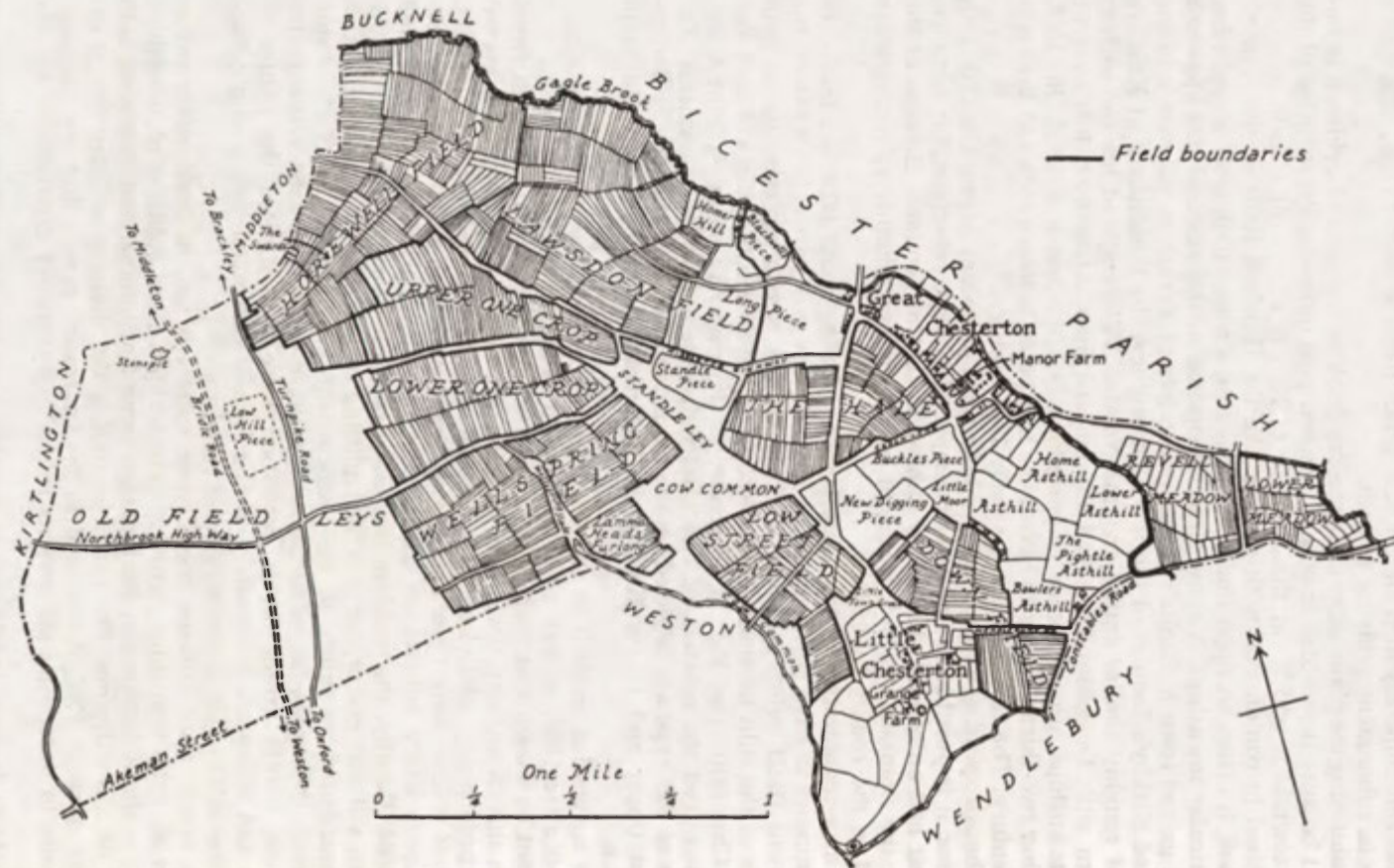


Fig. 5. Great and Little Chesterton, Oxfordshire (c. 1764-68). Reproduced with permission from M. D. Lobel (ed.), *A history of the County of Oxford*, VI, London 1959, p. 98

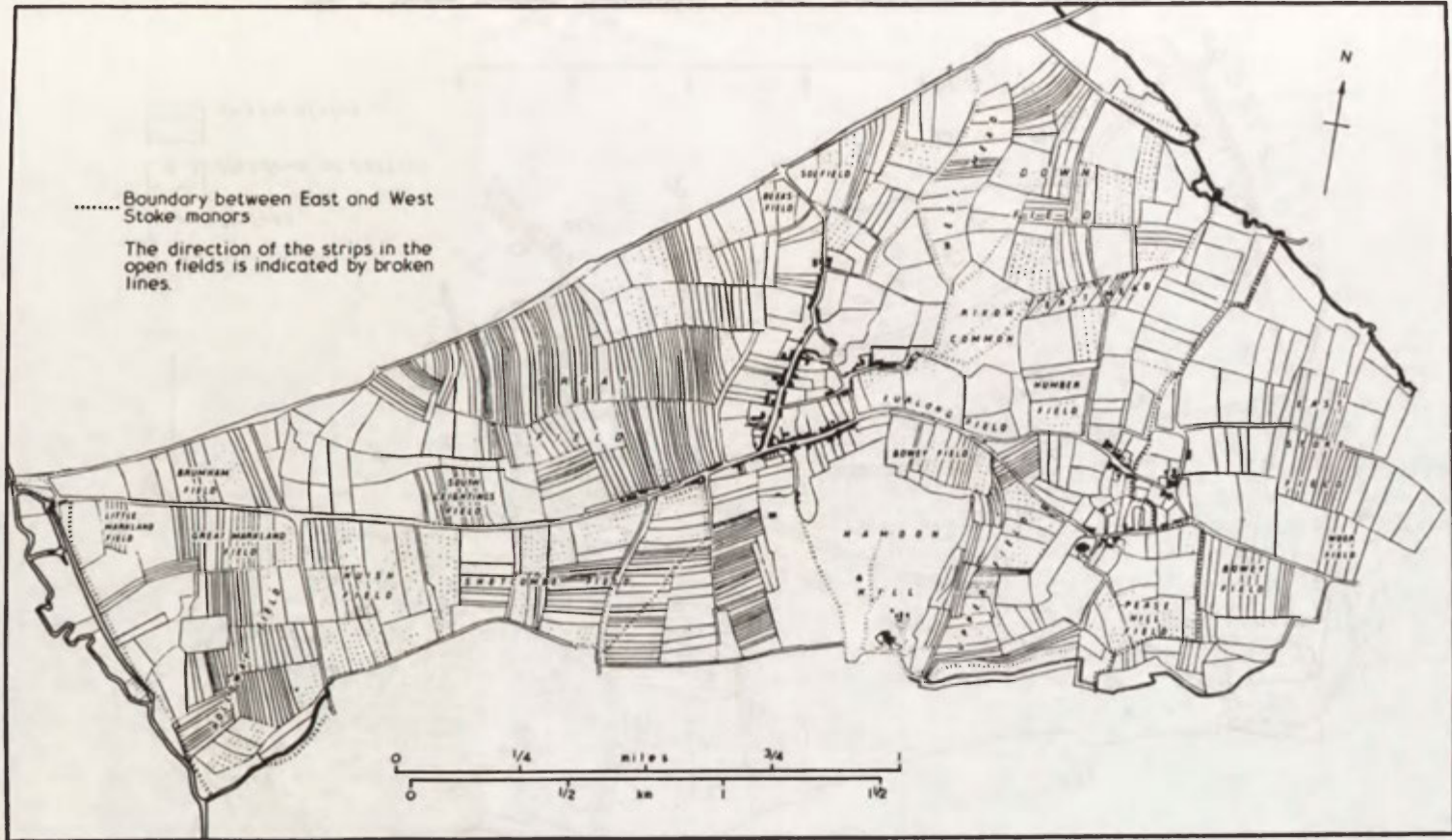


Fig. 6. The East and West Manors of Stoke sub Hamdon, Somerset (1776). Reproduced with permission from R. W. Dunning (ed.), *A history of the County of Somerset*, III, London 1974, p. 236



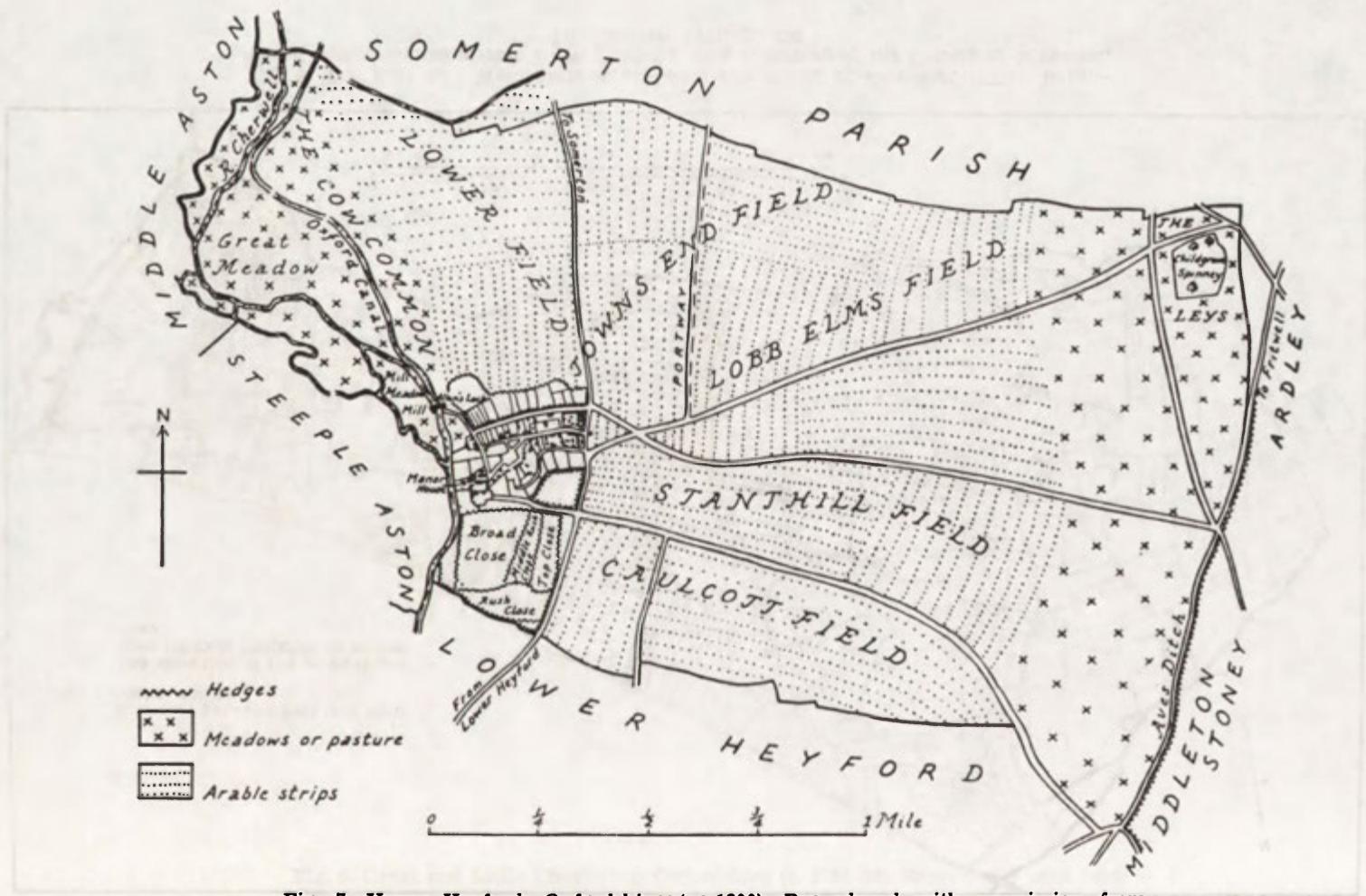


Fig. 7. Upper Heyford, Oxfordshire (c. 1800). Reproduced with permission from M. D. Lobel (ed.), *op.cit.*, VI, p. 202

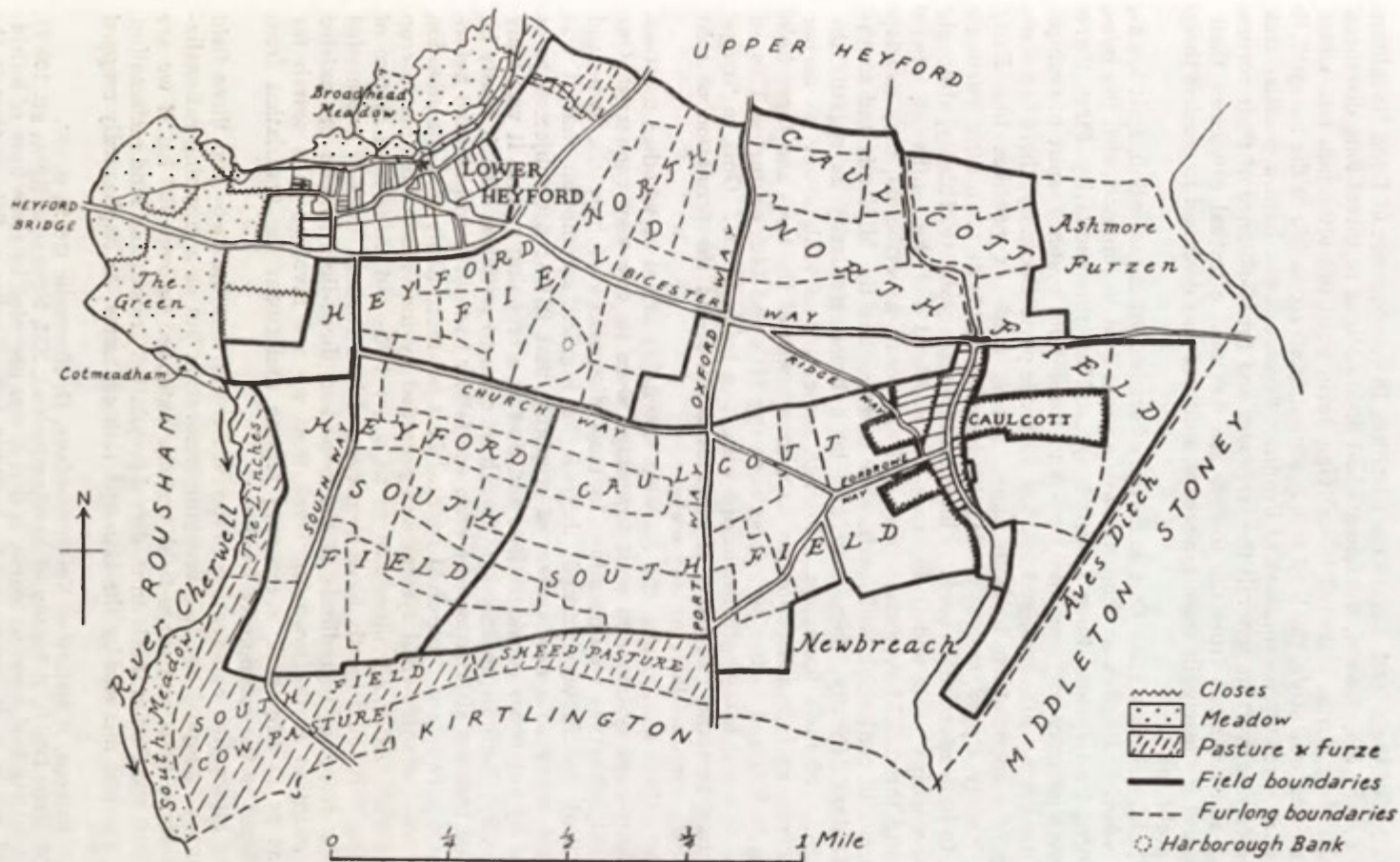


Fig. 8. Lower Heyford, Oxfordshire (17th century). Reproduced with permission from M. D. Lobel (ed.), *op.cit.*, VI, p. 189



cultivation of their land. Before the partition, in consequence of Long Haughton being a 'very long towne', the tenants had been obliged to travel long distances to reach their strips, scattered in outlying portions of the township, but, when the partition was made, the land was rendered more accessible to the tenants".<sup>17</sup> Similar motives were expressed at Prudhoe: "everie towne hath a peculiar and proper disease, yett in generall the largeness and great distance of their corne-fielded and commons from the townes are the most effectual cawses of their weakness".<sup>18</sup> Clearly, in these townships, splitting was designed to combat their scale problems.

It hardly needs stating that as a type of settlement organization, split townships, whether English or Scottish, have a great deal in common with the two- and three-field system. Four aspects help establish this similarity. First, there is their similarity of form: like two- and three-field systems, split townships were most commonly arranged into two or three parts. Secondly, there is a similarity of nomenclature. In both cases, use is made of prefixes like East, West, Nether, Upper, etc., to distinguish between fields or townships. Furthermore, in both cases, these prefixes have an interchangeability. Thirdly, although split townships occur widely in areas like Scotland and the southwest, where two- and three-field systems as such did not occur, nevertheless, they overlap and occur in conjunction with each other in areas like the Midlands and southern England. Finally, there may also be a broad similarity as regards the chronology of their formation. Although some writers still favour an earlier appearance, an increasing number place the growth of the two- and three-field system in England in the period between the 11th and 14th centuries. This, of course, is when many split townships were also being formed. Only in 'fringe' areas like Scotland and parts of Northumberland, did the formation of split townships continue later on any scale.

Given these similarities, the question inevitably arises of whether the two- and three-field system and split townships were in any way connected. One possibility deserves consideration. In most discussions of how the two- and three-field system was formed, there is an implicit assumption that it was designed solely as a new system of cropping, that it was not subjected to or shaped by any other considerations and that as a cropping system it was truly innovative. Such an assumption, though, is open to criticism. Can it really be assumed that the alternation of a crop and fallow had not been practised before its use in a two- and three-field system? Is it not more likely that the adoption of a two- and three-field system was preceded by individual attempts to crop in this way? After all, there had to be a *pre* two- and three-field system of cropping.<sup>19</sup> It could hardly have been created in a vacuum. Once it is conceded that the cropping ingredients of the two- and three-field system pre-existed their adoption at the township level, then we are involved in a search for reasons as to why such a cropping regime underwent the translation from a personal to the community level.

The alternative explanation proposed here is that the two- and three-field system was adopted not as a cropping innovation but as a cropping rationalization. Many two- and three-field systems extended to over 700 ha. If we are to believe the Postan thesis on medieval population growth and land reclamation, many reached this size by the 11th and 12th centuries. As haphazardly cropped

<sup>17</sup> E. Bateson, *A history of Northumberland*, II, Newcastle (1895), p. 367.

<sup>18</sup> M. Hope Dodds, *A history of Northumberland*, XII, Newcastle (1935), pp. 109–11.

<sup>19</sup> A widely held view, of course, is that it was preceded by some form of infield-outfield, see A. R. H. Baker and R. A. Butlin (eds), *Studies of field systems in the British Isles*, Cambridge 1973, p. 656.



subdivided field systems, if such they were, their problems of scale and complexity must have been felt acutely at this point. Whatever else it achieved, the adoption of a two- and three-field system of cropping introduced a sense of order to cropping, the grazing of arable after harvest and holding layout. At one stroke, it reformed a system which probably suffered for want of and imposed order.

To accept this interpretation brings the two- and three-field system and split townships within a single explanatory framework. Townships, or their lords, could adopt one or the other, or both, depending on the scale of the problem and whether proprietorship was itself split. More speculatively, it is possible that one may have served as an example for the other. The splitting of townships released a need for their re-organization. Faced with this task, few but the most disinterested lords or communities could have failed not to see this as an opportunity for making it a layout which assisted rather than hindered the cropping and grazing of land. It could well be, therefore, that the early splitting and re-organization of townships provided a nursery for the development of what became the two- and three-field system. Certainly, other townships could only have been impressed by the benefits which these more efficiently organized townships must have enjoyed after the event. In short then, the one served as a lesson for the other.

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## LES VILLAGES DE DRIES EN BASSE ET MOYENNE-BELGIQUE

FRANS DUSSART ET JACQUELINE CLAUDE

Il existait jadis, en Basse et Moyenne-Belgique, un grand nombre de lieux habités dont les constructions s'alignaient — parfois de façon assez dense, plus généralement en ordre lâche — autour d'une place herbeuse, plantée d'arbres ou non, de forme rectangulaire, triangulaire, ovale..., ou encore d'un terrain vague ou d'une pâture plus ou moins arborée et de forme irrégulière. A ces places et terrains à usage communautaire s'appliquait généralement le terme *dries* (pluriel: *driesen*) dans la partie néerlandophone du pays, *trieu* et *rejet* dans la partie francophone.

Ce type particulier d'habitat — que nous appellerons dans la suite *village de dries* — n'a pas encore fait l'objet d'une étude d'ensemble en ce qui concerne la Belgique. Dans son travail sur le *green village* de la plaine du Nord-Ouest européen, H. Thorpe mentionne à peine l'existence de ces villages de dries, qu'il situe en Flandre à l'est de la Lys et dans une zone étroite entre Saint-Nicolas-Waas et Tongres<sup>1</sup>. Il les assimile à l'habitat de rejet du Hainaut, décrit par R. Sevrin<sup>2</sup>.

Des cas particuliers ont cependant été étudiés et nous devons beaucoup aux remarques et aux travaux de nos collègues A. Verhulst, R. Sevrin, H. Van der Haegen, W. Grillet et surtout G. Schmook jr., qui a attiré notre attention sur l'habitat de dries si bien développé dans certaines parties de la Flandre.

Dans ce qui suit, nous voudrions indiquer, sommairement, ce que la littérature nous apprend des villages de dries, commenter une carte montrant leur répartition à la fin du XVIIIe siècle, décrire quelques types de ces villages et en retracer l'évolution récente. Cela permettra, croyons-nous, de déceler le rôle que, parfois encore, ils jouent, à l'heure actuelle, dans la trame si complexe de l'habitat du nord et du centre de la Belgique. Cela malgré les transformations profondes que la plupart parmi eux ont subies depuis deux siècles, c'est-à-dire depuis la fin de l'ancien régime et l'attribution, par la législation française, du tréfonds des terrains vagues à usage communautaire — apanage jadis des souverains — aux communes.

<sup>1</sup> H. Thorpe, The green village as a distinctive form of settlement in the North European Plain, dans: *Bull. Soc. Belge Étud. Géogr.*, 30, 1961, p. 111–112 et fig. 1, p. 95. Voir aussi, du même auteur, *The green village in its European setting*, Reprinted from the Fourth Viking Congress, Aberdeen 1965, p. 85–111. Cette étude est étayée par une littérature abondante, qui peut être complétée très utilement par de nombreux ouvrages plus récents que nous ne pouvons, faute de place, signaler ici.

<sup>2</sup> R. Sevrin, Le Hainaut occidental. Contribution à l'étude géographique et économique du Tournaisis et des régions d'Ath, de Lessines et de Lens, dans: *Le Hainaut économique. Rev. trimestr. de l'Inst. de Rech. Écon. de la prov. de Hainaut*, 8e année, n° 1 et 2, p. 158–159 et pl. XXI de l'Atlas.



Notre essai de carte de répartition des villages de dries (et de trieu et de rejet) s'étend à la partie de la Belgique située *grosso modo* au nord du sillon hydrographique de la Sambre et de la Meuse. Les exemples d'habitat de dries que nous donnerons se rapportent par contre uniquement à des villages et à des hameaux de la Flandre orientale, où il est sans doute le plus typiquement représenté (si l'on fait abstraction des villages de rejet du Hainaut).

## LE DRIES: NOTION, FONCTIONS, ORIGINE, ÉVOLUTION

Nous ne nous arrêtons pas aux longues discussions qui ont eu la notion de *dries* pour objet. Elles résultent des différentes acceptions de ce terme. Il peut se rapporter, en effet, à des herbages qui étaient labourés et cultivés de temps à autre, mais intégrés dans des exploitations privées<sup>3</sup>. Mais il peut s'agir aussi de terrains vagues à usage communautaire et généralement bordés des maisons formant les villages de dries. Seul ce dernier dries nous intéresse ici, et comme tel il est bien connu dans la littérature<sup>4</sup>.

Les fonctions des driesen étaient celles signalées par les auteurs qui se sont attachés à l'étude des "places de village" et des *green villages*: lieu de ressem-blement du bétail et éventuellement pâturage commun, terrain de réunion et de récréation pour la population riveraine, emplacement d'un lieu de culte, "usoir", souvent droit de planter et de couper les arbres sur une certaine étendue devant les habitations... Une haie, ou une levée de terre, clôturait le dries, à en juger d'après certains cas signalés dans la région de Gand<sup>5</sup>.

Sur l'origine de l'habitat de dries on ne sait que peu de chose jusqu'à présent. Traitant des formes de peuplement du haut moyen âge (VII<sup>e</sup>-IX<sup>e</sup> siècles) au nord-est de Gand, A. Verhulst<sup>6</sup> constate que les hameaux étaient le plus souvent établis autour d'un dries et qu'ils se composaient, généralement, d'une grande ferme seigneuriale et des maisons et petites exploitations paysannes qui en dépendaient. Ce fait nous paraît important: sans que l'on puisse définir avec précision leur rôle, soit dans l'origine, soit dans la persistance ou la disparition des driesen, il est certain que la présence de grosses propriétés en bordure de ceux-ci a déterminé une différenciation du point de vue foncier, et

<sup>3</sup> Il existe une nombreuse bibliographie à ce sujet. Contentons-nous de citer l'étude critique de H. Dittmaier, Esch und Driesch. Ein Beitrag zur agrargeschichtlichen Wortkunde, dans: *Aus Geschichte und Landeskunde. Forschungen und Darstellungen. Franz Steinbach zum 65. Geburtstag gewidmet von seinen Freunden und Schülern*, Bonn 1960, p. 705-726.

<sup>4</sup> On trouvera de bonnes définitions, par exemple, dans L.-L. De Bo, *Westvlaams Idioticon*, Gent 1892, p. 232-233 et J. Lindemans, Het probleem dries, dans: *Mededelingen van de Vereniging voor Naamkunde te Leuven en de Commissie voor Naamkunde te Amsterdam*, 27, 1951, p. 22-23.

<sup>5</sup> G. Schmoek jr., Evolutie van het landelijk landschap ten SW van Gent, als bijdrage tot de genese van het agrarisch complex in Zandig-Binnen-Vlaanderen, dans: *Tijdschr. Koninkl. Aardrijkskund. Genootsch. Antwerpen*, 78, 1967, p. 75 et Historisch-geografische verkenning van het landelijk landschap van Sint-Martens-Latem, dans: *Heemkring Scheldeveld*, I, 1970, p. 14.

<sup>6</sup> A. Verhulst, *Het landschap in Vlaanderen in historisch perspectief*, Antwerpen, s.d. (1964), p. 104 et *Histoire du paysage rural en Flandre de l'époque romaine au XVIII<sup>e</sup> siècle*, coll. "Notre Passé", Bruxelles 1966, p. 139. Voir les exemples cités, par le même auteur, dans *De Sint-Baafsabdij en haar grondbezit (VII<sup>e</sup>-XIV<sup>e</sup> eeuw)*, dans: *Verhandel. Koninkl. Vlaamse Acad. Wetensch., Letteren en Schone Kunst. België, Klasse der Letteren*, 30, Brussel 1958, passim. — Aux Archives de l'Etat à Gand, existe une belle carte ancienne — signalée par A. Verhulst du reste — sur laquelle apparaissent clairement cinq ou six driesen distincts au nord-est de Gand (Fonds Kaarten en Plans, R 369: "Kaerte van de Keure van Hyfte in Loochrixy", 1585).

de ce fait même a influencé l'évolution de l'habitat. G. Schmook jr.<sup>7</sup> émet l'hypothèse que les driesen pourraient être considérés comme un moment culminant d'une tendance à l'agglomération, se situant chronologiquement entre le haut moyen âge avec ses hameaux lâches (Drubbel) et le bas moyen âge avec son habitat tendant à l'alignement le long des routes.

On n'est pas mieux renseigné sur l'évolution des villages de dries au cours des siècles, si ce n'est pour ceux de la commune de Tronchiennes (Drongen) à partir du début du XVII<sup>e</sup> siècle. Dès que les contraintes collectives tombaient en désuétude, note G. Schmook jr., les villages de dries s'éclaircissaient par le transfert des fermes en des sites plus proches des terres exploitées ou le long des routes. Quelques-uns, néanmoins, ont pu s'accroître aux dimensions de véritables villages, tels Wondelgem et Doornzele examinés ci-après.

Pour la fin du XVIII<sup>e</sup> siècle seulement, la carte détaillée des Pays-Bas méridionaux, levée entre 1771 et 1774 sous la direction du comte de Ferraris<sup>8</sup>, permet de faire l'inventaire — assez exact et assez complet, croyons-nous — des villages de dries. Avec les documents les plus anciens du Cadastre, il est possible de constater l'évolution opérée en un demi-siècle. Avec un peu de patience, il est aisé ensuite, grâce aux autres documents tenus à jour du Cadastre<sup>9</sup>, de suivre jusqu'à l'époque actuelle la transformation des driesen et de leur habitat.

#### LA RÉPARTITION GÉOGRAPHIQUE DES VILLAGES DE DRIES ET DES FORMES APPARENTÉES

Presque tous les driesen ont perdu leur fonction et leur aspect anciens: ils ont été lotis, mis en culture, envahis par les constructions et de ce fait, ils ne sont plus, la plupart du temps, que difficilement reconnaissables dans le paysage rural sans une étude rétrospective. C'est la raison pour laquelle nous présentons une carte (Fig. 1) montrant la distribution de ces formes d'agglomération rurale à la fin du XVIII<sup>e</sup> siècle. Notre document de base est la carte de Ferraris; nous avons cependant relevé beaucoup de cas douteux, pour lesquels les plans Popp, et dans quelques cas les plans primitifs, ont apporté des précisions. Les lieux habités qui, à notre avis, sont sans aucun doute des villages de dries, sont représentés par des cercles pleins, éventuellement par un triangle lorsqu'ils ont été signalés par un auteur<sup>10</sup>. Les formes présentant un aspect moins évident de village de dries sont représentées par un cercle creux. Soyons modeste, notre carte ne prétend pas avoir un caractère exhaustif: des villages

<sup>7</sup> G. Schmook jr., Een evoluerend bewoningspatroon in Binnen-Vlaanderen. Methodologische bijdragen over Drongen bij Gent, dans: *Bull. Soc. Belge Etud. Géogr.*, 34, 1965, p. 105.

<sup>8</sup> *Carte de Cabinet des Pays-Bas autrichiens*, manuscrite et en couleurs, en 275 feuilles, à l'échelle approximative de 1:11 520, conservée à la Bibliothèque royale Albert 1<sup>er</sup>, section des Cartes et plans, à Bruxelles. On peut consulter aussi l'édition *fac simile*, à l'échelle malheureusement plus réduite (1:25 000), par "Pro Civitate", Bruxelles. (Ces documents sont désignés dans la suite du texte sous le nom de: Carte de Ferraris).

<sup>9</sup> Documents conservés dans chaque chef-lieu de province. Nous désignerons dans la suite du texte sous le nom de: plans primitifs, les plans qui n'ont pas subi de modification et qui montrent la situation parcellaire vers 1834. Pour le milieu du siècle dernier, les plans et les matrices de l'*Atlas cadastral de Belgique*, Bruges, s.d. (entre 1842 et 1879), par P.-C. Popp, nous ont également été très utiles. (Ils seront dans la suite désignés sous le nom de: plans Popp).

<sup>10</sup> En l'occurrence, les travaux déjà signalés de J. Lindemans, R. Sevrin, G. Schmook jr. et A. Verhulst.



Fig. 1. Répartition des villages de dries et des formes apparentées en Basse et Moyenne-Belgique, d'après la carte de Ferraris (1771-1774) et l'Atlas parcellaire de P.-C. Popp (1842-1879)

Cercles pleins — formes qui apparaissent nettement sur la carte de Ferraris et sur les plans Popp; triangles — idem, signalées dans la littérature; cercles creux — formes qui semblent pouvoir être rattachées au même type d'habitat. 1 — Wondelgem, 2 — Doornzele, 3 — De Zink, 4 — Drieswijk (Gontrode), 5 — driesen de Scheldewindeke, 6 — Eedwijk (Baaigem), 7 — driesen de Grotenberg, 8 — Drieswijk (Gijzegem)



de dries peuvent nous avoir échappé. D'autre part, à la fin du XVIII<sup>e</sup> siècle — répétons-le —, un certain nombre d'entre eux avaient déjà disparu<sup>11</sup> à la suite du partage et du lotissement de leur dries, de leur intégration dans une autre forme d'habitat ou même dans les extensions des villes<sup>12</sup>.

La carte indique que les villages de dries se répartissent schématiquement dans une zone de plus ou moins 30 km de largeur depuis l'interfluve Lys-Escaut jusqu'à une ligne reliant le cours supérieur de la Grande-Nèthe à Tirlemont<sup>13</sup>. Au sein de cette zone, on distingue cependant cinq régions où les villages de dries se présentent avec une densité plus grande. Une première région s'étend au nord et au sud de Tournai, surtout au nord-est de cette ville, sur la rive droite de l'Escaut. Il s'agit de l'habitat de rejet décrit par R. Sevrin<sup>14</sup>. Une deuxième s'observe entre l'Escaut et la Dendre, dans un triangle dont les sommets sont Gand, Audenarde et Alost. Une troisième entre Louvain, Tirlemont et le confluent Gette-Démer. Le bassin des deux Nèthes apparaît aussi comme une région de concentration, ainsi qu'une étendue soulignée par un axe ouest-est prenant naissance à l'ouest de Gand, longeant la limite méridionale du Pays de Waas pour venir rejoindre la Dyle au sud de Malines.

Notre carte appelle quelques remarques supplémentaires. Il est aisé de tracer une limite nette entre les villages de dries d'une part et les villages de trieu et de rejet d'autre part<sup>15</sup>; cela entre Tournai et Ath, car plus à l'est, le caractère sporadique des formes d'habitat assimilables à des *green villages* rendrait la tentative de délimitation trop aléatoire. De même, il serait hasardeux de distinguer l'aire d'extension du type d'habitat très allongé rappelant l'*Angerdorf* (par exemple Doornzele, examiné plus loin), en raison de l'évolution possible dans certains cas des *Anger* en plusieurs driesen. Nous avons repéré des villages du type *Angerdorf* essentiellement dans deux zones: (a) suivant un axe ouest-est depuis Doornzele au nord de Gand jusqu'à Saint-Nicolas-Waas; (b) suivant un arc de cercle orienté *grosso modo* nord-sud depuis l'est de Turnhout jusqu'à une ligne Louvain-Tirlemont en passant par le cours supérieur de la Grande-Nèthe. Ajoutons à cela qu'il nous paraît important de confirmer que, souvent, de grosses propriétés avec un château et/ou une ferme importante se situent au voisinage, voire en bordure même, des driesen. Enfin, les villages de dries sont fréquemment situés à faible distance des chef-lieux des communes.

Il nous paraît difficile, et en tout cas prématuré, d'expliquer la répartition de l'habitat de dries en Basse et Moyenne-Belgique. Il est certain d'ailleurs qu'il ne s'est pas mis en place partout à la même époque et qu'il faudrait tenir compte de différents stades de peuplement, les formes les plus anciennes remontant au

<sup>11</sup> Comme certains, signalés par A. Verhulst, au nord-est et au sud de Gand (ouvr. cité, passim) et par G. Schmoock jr., à l'ouest de cette ville (*Een evoluerend bewoningspatroon*, ouvr. cité, p. 93-97).

<sup>12</sup> Comme à Gand, Malines, Termonde. L'immense grand-place de Saint-Nicolas-Waas est un ancien dries (voir *Atlas des villes de la Belgique au XVI<sup>e</sup> siècle*, 105 plans du Géographe Jacques de Deventer, Institut National de Géographie, Bruxelles, s.d.).

<sup>13</sup> L'habitat de dries, croyons-nous, ne s'arrête pas à la frontière orientale de la Belgique, on pourrait sans doute le retrouver dans le Limbourg néerlandais et en Rhénanie. La carte de Ferraris montre un bel exemple à Rickelrath notamment. En tout cas, le toponyme *Driesch* s'étend jusqu'en Rhénanie et Nassau et même au-delà (H. Dittmaier, ouvr. cité, et *Rheinische Flurnamen*, Bonn 1963, p. 54-55).

<sup>14</sup> Ouvr. cité, p. 158-159.

<sup>15</sup> R. Sevrin (ouvr. cité, pl. XXI de l'Atlas) a quant à lui délimité les aires d'extension des toponymes *rejet* et *trieu* dans le Hainaut occidental.

moyen âge<sup>16</sup>. Une constatation s'impose cependant: il semble que les villages de dries fassent défaut aussi bien dans les zones de grande dispersion de l'habitat — telles les Polders maritimes et la Flandre occidentale — que dans celles d'habitat densément groupé, telle la Hesbaye sèche<sup>17</sup>. Il ne nous est pas possible non plus d'établir un rapport avec le dessin parcellaire<sup>18</sup>. Seules des études morpho-génétiques d'un grand nombre de cas permettraient de se rapprocher de la solution du problème des origines des villages de dries et de leurs modes d'implantation en Basse et Moyenne-Belgique.

#### DESCRIPTION ET ÉVOLUTION RÉCENTE DE QUELQUES VILLAGES DE DRIES EN FLANDRE

Nous avons fait une étude plus détaillée de quelques villages de dries de la Flandre (Fig. 1, n° 1-8), en nous attachant à leur aspect et à leur évolution depuis la fin du XVIII<sup>e</sup> siècle. La place qui nous est mesurée ici ne nous permet que d'en donner un bref aperçu, qui, nous l'espérons, complétera très utilement les données que nous possédons déjà grâce aux recherches de G. Schmook jr. à l'est de Gand<sup>19</sup>. Deux des villages que nous examinerons ont gardé à peu près, malgré l'étoffement de l'habitat, leur aspect originel. Dans les autres cas, le caractère primitif s'est estompé dans des mesures plus ou moins appréciables, mais l'existence ancienne d'un dries et l'alignement des maisons autour de ce dernier sont intervenus en tant qu'éléments originaux dans la forme d'habitat actuelle.

1. Le centre de la commune de Wondelgem, situé à 5 km au nord de Gand (Fig. 1, n° 1) est constitué par un beau dries de forme trapézoïdale, de quelque 3,5 ha de superficie. Des hêtres élancés y jettent leur ombre sur une maigre pelouse et encadrent l'église paroissiale et le cimetière. En bordure de ce dries se trouvait jadis une grosse ferme seigneuriale avec ses dépendances, très visibles sur une carte de 1576 reproduite par A. Verhulst<sup>20</sup>. A la fin du XVIII<sup>e</sup> siècle et au début du XIX<sup>e</sup><sup>21</sup>, le dries de Wondelgem est entouré d'une vingtaine de fermes, sauf le côté septentrional presque entièrement occupé par une grosse propriété de 73 ha, avec château, parc et bâtiments de ferme à l'emplacement de l'ancien domaine rural dont il vient d'être question. En dehors de quelques maisons, les fermes de type allongé sont à quelque distance des routes délimitant le dries, ce qui suggère l'idée que celui-ci était initialement un peu plus étendu: l'appropriation privée des petites pièces de terre entre les constructions

<sup>16</sup> A en juger par les rares exemples cités dans la littérature. Voir A. Verhulst, ouvr. cités.

<sup>17</sup> Voir notamment la carte des formes d'habitat dans F. Dussart, *Geographie der ländlichen Siedlungsformen in Belgien und Luxemburg*, dans: *Geogr. Rundschau*, 9, 1957, p. 12-18.

<sup>18</sup> La carte hors texte qui figure dans F. Dussart, *Les types de dessin parcellaire et leur répartition en Belgique*, dans: *Bull. Soc. Belge Etud. Géogr.*, 30, 1961, p. 21-65, est trop synthétique pour permettre d'établir des relations précises. D'autre part, nous n'avons pas relevé systématiquement et de façon détaillée les types de dessin parcellaire à proximité des villages de dries.

<sup>19</sup> G. Schmook jr., *Een evolverend bewoningspatroon*, ouvr. cité, p. 93-97.

<sup>20</sup> A. Verhulst, *De Sint-Baafsabdij*, ouvr. cité, pl. IV. Sur ce grand domaine rural, voir cet ouvrage ainsi que *Het landschap*, ouvr. cité, p. 114.

<sup>21</sup> D'après la carte de Ferraris et le plan primitif. Les documents cadastraux de Wondelgem, ainsi que ceux se rapportant aux villages étudiés ci-après, ont été consultés à la Direction du Cadastre à Gand, où M. Kreps, directeur, M. R. Steenhaut, inspecteur, ainsi que leurs collaborateurs nous ont réservé le meilleur accueil. Nous les en remercions vivement.



et les routes a déjà permis — et permettra encore ultérieurement — à l'habitat de s'aligner le long de celles-ci, suivant un processus que nous observerons encore dans la suite.

Le dries de Wondelgem remplit encore à présent certaines des fonctions anciennes des *greens*: siège de l'église et du cimetière, lieu de réunion, de promenade et de loisirs (tir à l'arc). Ce n'est pas sans raison que F. De Potter et J. Broeckaert<sup>22</sup> disaient, il y a un siècle, qu'il était le plus grand et le plus beau, avec Doornzele, des driesen qu'ils connaissaient. Le site est classé et il restera sans doute ainsi à l'abri de toute emprise ou détérioration.

2. Doornzele est un hameau important de la commune d'Evergem, situé à 12 km environ au nord de Gand (Fig. 1, n° 2)<sup>23</sup>. Sur la carte de Ferraris, on voit les habitations entourer un vaste dries de quelque 16 ha de superficie, s'allongeant sur 1500 m, mais ne présentant qu'une largeur de 160 m environ. Le centre est une pâture commune; les deux zones bordières sont plantées d'arbres; un moulin à vent se dresse, près d'une mare, à l'une des extrémités de cette vaste étendue qui ressemble singulièrement à un *Anger*. Des sentiers de desserte et des haies séparent le tout des parcelles bâties de la périphérie. De nombreuses maisons s'alignent à la bordure méridionale; au nord, au contraire, un château et une abbaye créent des vides dans la continuité de l'habitat<sup>24</sup>.

Le plan primitif (1834) permet de noter les transformations. Une église a été construite au milieu du dries (en 1775). Les deux zones arborées sont subdivisées en un grand nombre de petits lots, s'étendant notamment dans le prolongement des parcelles bâties. Après l'attribution de la propriété du dries à la commune d'Evergem au début du nouveau régime, les habitants de Doornzele surent s'opposer aux tentatives de mise en vente de ces "communaux"; ils gardèrent en outre le droit ancestral de planter et de couper des arbres sur une partie du dries s'étendant en face de leurs maisons. Le Cadastre concrétisa ce droit en attribuant — peut-être erronément? — ces parcelles aux propriétaires riverains, parcelles dont ils n'ont, en fait, que l'usufruit: l'interdiction d'y élever des constructions persiste encore de nos jours<sup>25</sup>. En fait, ces parcelles boisées font toujours partie du dries.

Depuis le début du siècle dernier, l'aspect du dries et de l'habitat de Doornzele n'a pas fondamentalement changé<sup>26</sup>, si ce n'est que les petites maisons s'alignant le long de l'ancien sentier (à présent, route) de desserte se sont multipliées, laissant un peu en retrait les anciennes fermes précédées d'une prairie et d'un verger. Il ne reste cependant plus que deux ou trois exploitations agricoles, la plupart des habitants travaillant à Gand ou dans les industries

<sup>22</sup> F. De Potter en J. Broeckaert, *Geschiedenis van de gemeenten der provincie Oost-Vlaanderen. Eerste reeks, arrondissement Gent, zevende deel, Gent 1864-1870* (article: Wondelgem, p. 46).

<sup>23</sup> Nous tenons à remercier vivement M. A. De Vos, instituteur en chef à Evergem, pour les renseignements qu'il nous a communiqués.

<sup>24</sup> La place nous manque pour nous étendre sur le rôle, encore peu connu d'ailleurs, de ces deux établissements. Voir A. Verhulst, *De Sint-Baafsabdij*, ouvr. cité; F. De Potter en J. Broeckaert, ouvr. cité (article: Everghem); A. De Vos, *De Geschiedenis van Evergem in vogelvlucht*, dans: *Davidfonds Evergem*, Jubileumboek 1927-1952, s. l. n. d.; etc.

<sup>25</sup> On pourrait rapprocher le cas de Doornzele de celui d'Alne, cité par H. Thorpe (ouvr. cité, p. 104, fig. 7), mais c'est tout le *green* de ce village du Yorkshire qui fut, en 1911, converti en jardins clôturés par les riverains.

<sup>26</sup> Doornzele avait attiré l'attention de R. Blanchard au début de notre siècle; il le décrit en signalant la "largeur énorme de la rue, plantée d'arbres et servant de pâture", mais méconnaît son caractère de village de dries (*La Flandre. Etude géographique de la plaine flamande en France, Belgique et Hollande*, Paris 1906, p. 426).



proches du canal de Gand à Terneuzen. Ilot de verdure prévu dans les plans d'aménagement de la commune d'Evergem, l'espoir existe que le beau dries de Doornzele soit préservé, malgré quelques dégradations que l'on y observe (arbres de haute futaie par endroits remplacés par de jeunes résineux ou par des arbres fruitiers). Avec son pâturage commun, ses plantations d'arbres, son église, son cimetière, ses plaines de jeux et de sports (d'un effet pas toujours heureux), il remplit toujours ses fonctions anciennes.

Aux villages de Wondelgem et de Doornzele avec leur place centrale ou dries pratiquement intact, s'opposent les cas où seule une étude rétrospective permet de reconstituer l'ancien habitat de dries ou de déceler comment celui-ci s'imbrique dans l'habitat actuel.

3. Dans la commune de Munte, à 12 km au sud de Gand (Fig. 1, n° 3), existait jadis, dans une tête de vallée, une vaste pâture communale de forme polygonale couvrant quelque 6,5 ha, appelée De Zink (Fig. 2)<sup>27</sup>. Le plan cadastral de 1834 montre une quinzaine de constructions disposées en ordre lâche sur le



Fig. 2. Neerenzinddries (Munte), Den Audendries et Den Eedtdries (Scheldewindeke), Bayghem Dries (Baaigem), d'après la carte de Ferraris, Bibliothèque royale Albert 1er, Bruxelles

<sup>27</sup> Archives de l'Etat à Gand, Fonds Kaarten en Plans, nr. 2174: "Kaerte descriptieve van de parochie van Munte binnen de Baronie van Roden, Anno 1565". — Carte de Ferraris (où il figure sous le nom de Neerenzinddries).

pourtour du dries, sauf du côté occidental où, au milieu d'une grande propriété terrienne, ne se dresse qu'un château d'origine féodale accompagné d'une grosse ferme. En 1844, De Zink est loti en parcelles de dimensions variables, un réseau routier est créé. La plupart des lots sont acquis par les propriétaires des fermes riveraines et convertis en terre de culture. Dès 1878, des maisons y apparaissent. Actuellement, entièrement cultivé et occupé par quelques constructions, l'ancien dries de De Zink n'est plus que difficilement reconnaissable, en raison aussi d'ailleurs de sa forme irrégulière. Mais la plupart des sites habités qui jadis jalonnaient sa lisière existent toujours, conditionnent l'aspect de l'habitat, tandis qu'à la bordure occidentale, la grosse propriété signalée précédemment — quelque 80 ha — continue à faire obstacle à l'extension des constructions.

4. Le dries de Drieswijk (commune de Gontrode), à 9 km au sud-est de Gand (Fig. 1, n° 4), couvre à peine 2 ha. Son intérêt réside entre autres dans sa situation proche du village de Gontrode, sur un sol moins favorable, suggérant une colonisation plus récente. A la fin du XVIII<sup>e</sup> siècle, ce dries est arboré, il a deux mares et il est entouré d'une dizaine de constructions qui dessinent un petit village de forme presque circulaire. Le plan Popp de 1859<sup>28</sup> le montre loti, réparti entre les propriétaires des fermes riveraines, mais toujours boisé. Actuellement, les arbres ont disparu, une partie est constituée par un verger et un parc, le reste n'étant que mauvais pâturage ou friche; trois maisons s'y sont édifiées. Mais on peut néanmoins encore repérer assez facilement à Drieswijk l'ancien dries avec sa ceinture de vieilles constructions, quelque peu délabrées parfois.

5. A Grotenberg, à 21 km au sud-est de Gand (Fig. 1, n° 7), il y avait autrefois trois driesen. Le plus grand, le Grote dries, était une pâture, plantée d'arbres, de 6 ha de superficie; la partie centrale était encadrée par trois routes formant un triangle. Le plus petit, le Kleine dries, n'avait qu'une étendue insignifiante (40 ares). Une église est construite en 1854 à la pointe nord-ouest du Grote dries,

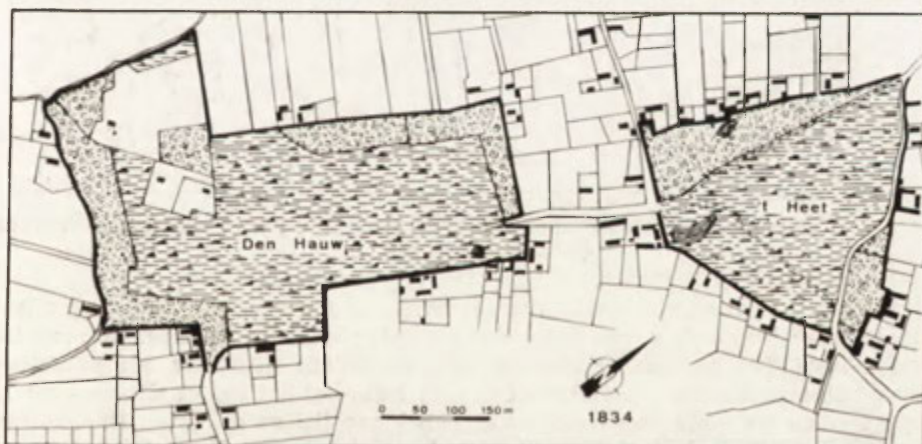


Fig. 3. Les driesen de Scheldewindeke en 1834, d'après le plan cadastral primitif de la commune de Scheldewindeke

Le trait gras entoure les biens de la commune; les tirets — terrains herbeux incultes; le moucheté — terrains arborés

<sup>28</sup> Le plan primitif de 1834 n'a pu être retrouvé. Toutefois entre les données de la matrice cadastrale de 1834 et celle de Popp, il n'y a guère de différence: en 1834 déjà, le dries n'appartenait plus à la commune.



mais ce n'est qu'en 1861 que les deux driesen seront partagés entre des personnes de qualités très différentes, parmi lesquelles le propriétaire d'une grosse ferme se trouvant à la pointe méridionale du Grote dries. Cette vente s'accompagne de la mise en culture de ce dernier, puis, en 1865, de la construction d'un vaste couvent et de ses annexes; à partir de 1887, de nombreuses maisons viennent s'y édifier. De même, le Kleine dries se couvrira rapidement de maisons dès 1886. De ces deux anciens driesen, il ne reste plus de trace. Seul le troisième dries, le Koekendries, bien ecclésiastique d'une superficie d'un demi-hectare environ, est resté un espace engazonné, clôturé il est vrai, réservé aux sports et aux jeux.

6. Vers les confins occidentaux de la commune de Scheldewindeke, à quelque 13,5 km au sud-sud-est de Gand (Fig. 1, n° 5), existaient à la fin du XVIII<sup>e</sup> siècle (Fig. 2), deux driesen caractéristiques, Den Hauw et Het Heet, s'étendant à l'encontre de celui de De Zink sur un sol plutôt sec. En 1834 (Fig. 3), Den Hauw est un pâturage communal de quelque 20 ha de superficie, les zones périphériques sont partiellement boisées et une vingtaine de fermes plus ou moins espacées se répartissent tout autour. Het Heet, moins étendu (10 ha), est aussi un pâturage communal, avec une zone marginale en partie boisée; ici, l'habitat périphérique est plus dense. La vente de ces terrains communaux ne tarde guère; dès 1841, un réseau routier est tracé à l'intérieur des driesen (Fig. 4):

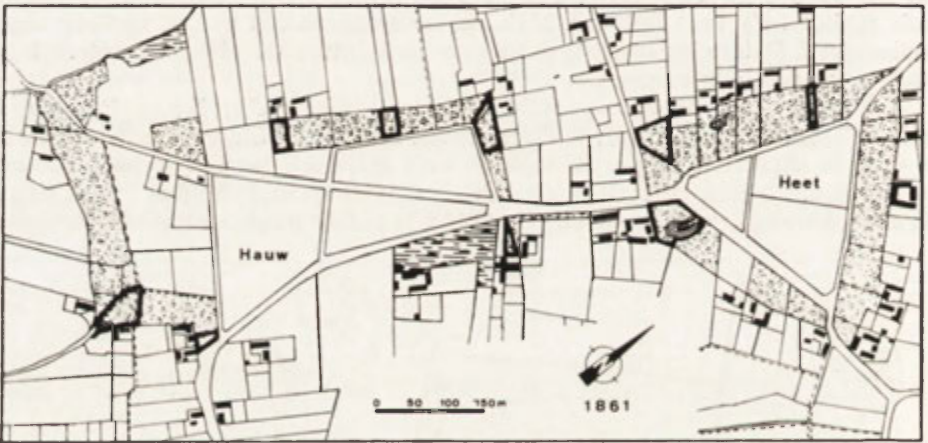


Fig. 4. Les driesen de Scheldewindeke en 1861, d'après le plan Popp (même légende que celle de la Fig. 3)

à Het Heet il forme un triangle, dont le tracé ne correspond que de façon imparfaite avec les contours du dries qui formait plutôt un trapèze. Ce sont les propriétaires des maisons riveraines qui se voient attribuer les parcelles, encore plantées d'arbres, se trouvant devant leurs habitations et situées pour la plupart entre les nouveaux chemins et l'ancienne lisière du dries. Par contre, tout ce qui se trouve à l'intérieur du triangle routier de Het Heet et du polygone de Den Hauw est acquis par un seul propriétaire résidant à Gand, ce qui freinera l'extension de l'habitat, contrairement à ce qui s'est produit à Grotenberg par exemple. Ce n'est qu'à partir de 1872 que l'on voit apparaître sur l'ancien dries de Het Heet, converti en cultures et herbages, la première des neuf constructions actuelles (dont quatre, il est vrai, ne sont apparues qu'après 1973) (Fig. 5); d'autres suivront sans doute. Mais déjà dès 1865, les reconstructions et les agrandissements des fermes anciennes, la construction de nouvelles



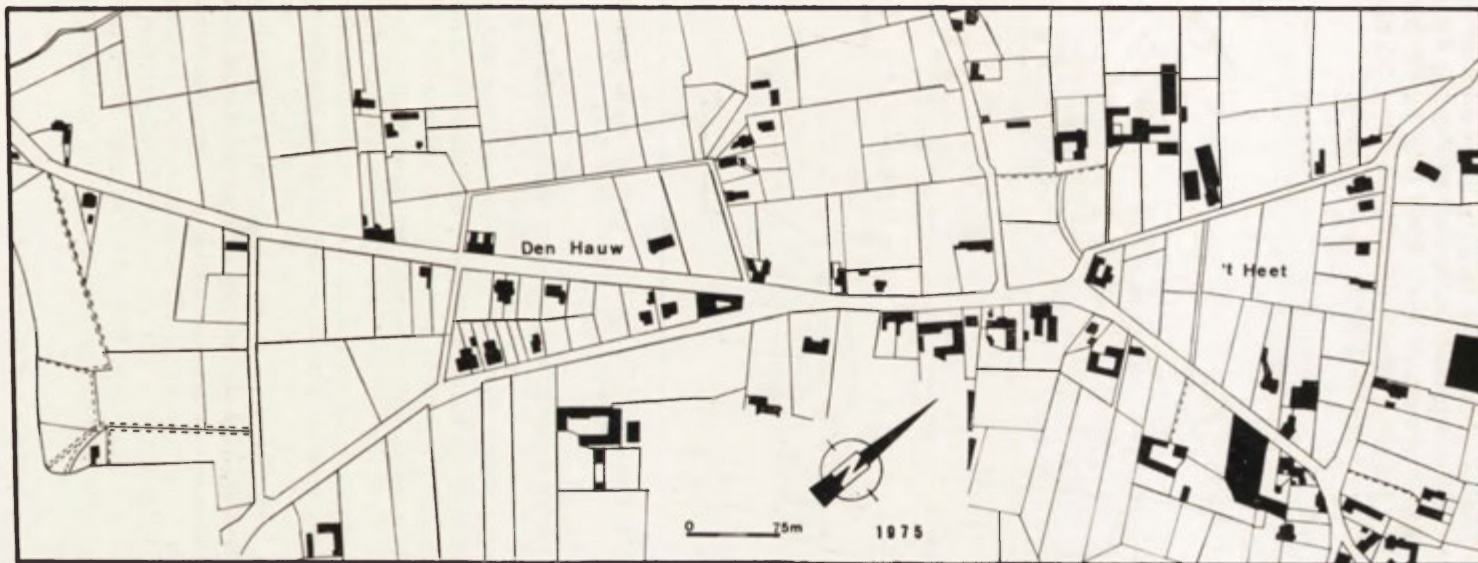


Fig. 5. Aspect actuel des anciens driesen de Scheldewindeke, d'après le plan cadastral actuel de la commune de Scheldewindeke

maisons s'effectuent en avant des sites primitifs, le long des routes, sur les anciennes parcelles boisées. Den Hauw montre une évolution analogue, mais à partir de 1882; c'est sur une partie, seulement, de l'ancien dries que s'édifieront les constructions (principalement après 1960) (Fig. 5). Ce fait, avec le rapprochement centripède des sites habités crée l'impression, ici plus encore qu'à Het Heet, d'un dries plus petit qu'il ne le fut en réalité.

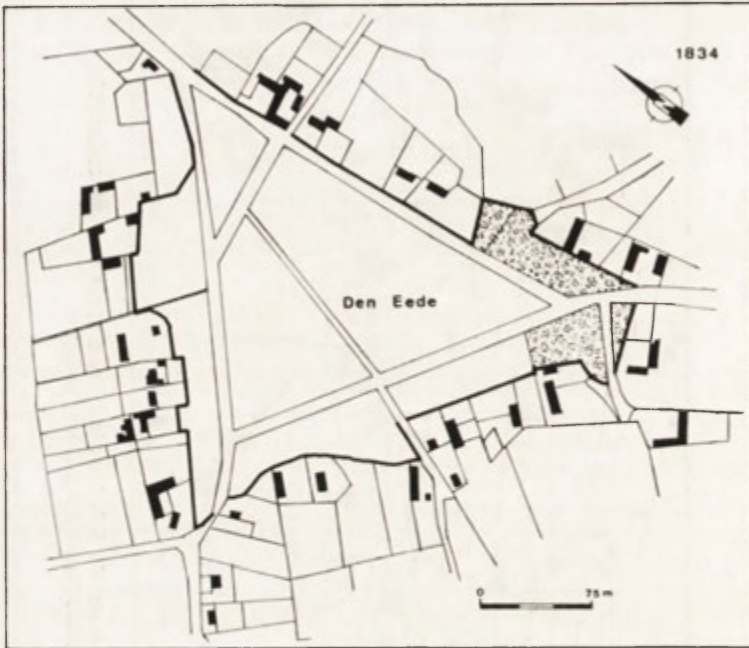


Fig. 6. Den Eede en 1834, d'après le plan cadastral primitif de la commune de Baaigem (même légende que celle de la Fig. 3)

7. Proche de ces deux driesen, plus à l'ouest sur le territoire de la commune de Baaigem, à 14 km environ au sud de Gand (Fig. 1, n° 6), se trouve le hameau d'Eedwijk. Au XVIII<sup>e</sup> siècle (Fig. 2), ses maisons entourent un dries sur terrain sec de quelque 4,5 ha de superficie, dessinant un triangle irrégulier, dont la partie septentrionale semble déjà mise en culture. En 1834 (Fig. 6), le dries est presque entièrement cultivé — tout en étant encore propriété communale — et des chemins rectilignes, tracés à quelque distance de la lisière, forment un triangle équilatéral. Grâce à deux routes supplémentaires à l'intérieur de ce triangle, celui-ci apparaît comme divisé en trois grandes pièces de terre louées sans doute à des cultivateurs locaux. La zone bordière, entre le triangle routier et la lisière irrégulière du dries, est encore en grande partie à l'état indivis, mais en 1850-1851, les lotissements s'y opèrent. Deux ou trois étrangers y achètent des lots, mais la plupart sont acquis par les propriétaires des parcelles bâties riveraines. Le processus paraît courant — nous l'avons déjà observé précédemment, à Scheldewindeke par exemple<sup>29</sup>: la disparition du dries commence par son rétrécissement à la suite de l'appropriation privée des zones marginales situées à l'extérieur des nouveaux chemins rectilignes qui encerclent

<sup>29</sup> Sans compter le cas quelque peu particulier de Doornzele.

le coeur du dries. De plus, on constate que l'habitat "bouge": les bâtiments des anciennes fermes, mus — si l'on peut s'exprimer ainsi! — d'un mouvement centripète, sont remplacés petit à petit par des nouveaux qui viennent s'installer le long des chemins créés, sur les petites parcelles qui résultent du partage de la partie marginale du dries (Fig. 7). Quant à l'espace vide à l'intérieur du triangle routier, les lotissements et les ventes n'y débiteront qu'en 1884, et s'y poursuivront encore en 1910. Ce morcellement s'accompagne, bien entendu, de l'édification de quelques maisons.



Fig. 7. Den Eede en 1975, d'après le plan cadastral actuel de la commune de Baaigem

8. Il reste un dernier cas à envisager, le dries de Gijzegem, appelé lui aussi Drieswijk. De 2,5 ha de superficie, situé à 4,5 km au nord d'Alost (Fig. 1, n° 8), il se trouve à peu de distance du chef-lieu de la commune. En 1771-1774, c'était encore une étendue herbeuse, avec une mare; une vingtaine de maisons s'alignaient sur le pourtour. En 1834, un chemin longeant ces constructions souligne le rectangle irrégulier que dessine le dries: celui-ci est à ce moment parcellé et mis en culture. A part une parcelle appartenant au châtelain de Gijzegem, dont une partie des terres borde le nord-est du dries, la commune reste propriétaire de l'ensemble de celui-ci. Jusqu'en 1949, l'allure générale du hameau de Drieswijk ne se modifie pas, si l'on fait abstraction de l'étoffement de l'habitat existant. Mais à partir de cette date, la commune cède ses terres à la Société nationale terrienne qui crée, sur le dries, un lotissement résidentiel; dès 1956, on y voit apparaître des pavillons et villas modernes, dont le style contraste avec celui des anciennes constructions rurales. Nous avons donc affaire ici à un cas de disparition tardive mais brusque d'un dries, encore très reconnaissable malgré sa mise en culture, à la suite de sa transformation en un lotissement résidentiel.



## CONCLUSION

A première vue, les villages de dries ne jouent plus qu'un rôle effacé dans l'image qu'offre l'habitat rural de la Basse et Moyenne-Belgique. Dans de rares cas seulement, ils sont restés relativement intacts, groupant leurs maisons soit autour d'une grande place communale généralement arborée, qui, avec son nom de dries, a conservé au moins une partie de ses fonctions communautaires anciennes (Wondelgem, Doornzele), soit autour d'une étendue convertie, certes, en terres de culture et herbages, mais restée au moins à l'abri de toute construction (Slindonkdries<sup>30</sup>, dries de Gijzegem jusqu'il y a peu de temps). Mais la plupart du temps, l'ancien caractère de village de dries ne se reconnaît plus au premier coup d'oeil, et la chose est même souvent impossible sans une étude rétrospective. C'est la raison pour laquelle nous croyons que la carte de répartition des villages de dries et des formes apparentées à la fin du XVIII<sup>e</sup> siècle peut être de quelque utilité et éventuellement constituer le point de départ de recherches plus approfondies. Elle montre en tout cas comment ces villages — cellules d'habitat différentes des autres: fermes isolées, noyaux denses, alignement le long des routes... se distribuaient, avec des densités variables selon les régions, dans une large zone traversant le nord de la Belgique *grosso modo* d'ouest en est.

Les driesen (les rejets et les trieux) autour desquels se groupaient les constructions avaient des dimensions et des formes très variables, se présentant ici sous l'aspect d'un pâturage assez vaste aux contours très irréguliers (De Zink), là comme une étendue large mais très allongée, arborée, rappelant l'*Anger* germanique (Doornzele), en passant par des places rectangulaires ou triangulaires (Baaigem), voire circulaires. Ils remplissaient les fonctions décrites pour les *greens*.

L'appropriation des driesen par les communes, conformément aux nouvelles lois françaises, puis par des particuliers — cultivateurs ou non — à la suite des partages et des ventes opérées par les communes, allait peu à peu sonner le glas de la plupart des driesen, trieux et rejets, et modifier l'aspect de l'habitat lié à eux<sup>31</sup>. Le processus débuta en général par l'aménagement d'une nouvelle voirie, qui, souvent, était tracée à l'intérieur du dries — et non à sa lisière —, à une distance plus ou moins grande (de 25 à 75 m) des parcelles bâties entourant celui-ci. C'est la création de ce réseau routier qui a pu donner au dries, ainsi rétréci, la forme triangulaire que l'on a parfois considéré, erronément, comme typique. En même temps, généralement, on procéda à son lotissement et à sa conversion en terre de culture. La commune en resta parfois le propriétaire pour la totalité ou pour une partie. Dans la plupart des cas, il y a eu appropriation privée: acquisition, par les riverains, des zones marginales entre les nouveaux chemins et l'ancienne limite du dries, du restant par des particuliers pouvant même être étrangers à la commune. Du point de vue de l'habitat, l'ancien dries subit une double évolution: d'une part le rapprochement graduel des constructions depuis la ligne bordière vers le centre du dries, attirées par le réseau routier créé, et d'autre part, l'occupation partielle ou totale de la partie centrale du dries. Mais les modalités diffèrent d'un exemple à l'autre. Ici, le mouvement centripède se fit insensiblement, l'intérieur resta vide de construction ou presque, de sorte que l'ancien dries et son village se laissent encore

<sup>30</sup> Etudié par G. Schmook jr., *Een evoluerend bewoningspatroon*, ouvr. cité, p. 93.

<sup>31</sup> Il va de soi que sont intervenus également la disparition des contraintes collectives, la diminution de l'importance des incultes dans l'économie rurale, le souci de créer de nouvelles terres de culture, etc., facteurs qui se sont manifestés avec une ampleur de plus en plus grande vers la fin du XVIII<sup>e</sup> siècle.

plus ou moins aisément repérer. Ailleurs, le dries a été envahi par de nombreuses maisons et l'ancien alignement de constructions qui le cernaient ne se marque plus dans le paysage que par quelques vieux bâtiments ruraux, les traces d'un verger, des ressauts de terrain... C'est la localisation des villages de dries par rapport aux grands-routes qui semble avoir influencé le plus la rapidité de leur évolution.

La présence d'un grand domaine d'origine féodale ou d'une ferme en bordure des driesen semble bien avoir joué un rôle non négligeable dans l'évolution de certains villages de dries, empêchant l'habitat de s'étendre sur leurs terres, et conférant ainsi à ceux-ci un aspect plus ouvert. Peut-être ces propriétés, laïques ou ecclésiastiques, ont-elles eu une influence, si pas nécessairement à l'origine des villages de dries, du moins dans leur développement? Seules des recherches morpho-génétiques détaillées d'un grand nombre de cas pourraient répondre à la question et aboutir à des conclusions fondées. L'étude des villages de dries reste d'une complexité extrême; chacun d'eux, malgré les analogies qu'ils peuvent présenter, constitue un cas particulier dont le rôle dans les formes d'habitat actuelles est parfois difficile à cerner<sup>32</sup>. Là où le dries persiste, les constructions nouvelles étoffent sa périphérie ou s'installent le long des routes qui y mènent; ailleurs, la forme de village de dries s'estompe, effacée par les lotissements. Mais le village de dries reste malgré tout, et dans une mesure plus ou moins grande selon les cas, un élément de la trame de l'habitat dans le nord et le centre de la Belgique.

Il nous est sans doute permis d'exprimer le voeu que cette forme d'habitat soit signalée et définie, parmi les autres types d'"habitat avec une disposition des maisons autour d'une place centrale (*Platzsiedlungen*)", dans la terminologie du paysage agraire élaborée sous la direction de H. Uhlig et C. Lienau<sup>33</sup>. Les villages de dries, de rejet, de trieu sont des formes d'habitat moins achevées que les exemples décrits par ces auteurs: les constructions — rappelons-le — sont plus lâchement réparties autour du dries, du rejet, du trieu, voire parfois absentes d'un côté. La forme de ceux-ci est aussi plus irrégulière. Des formes incomplètes analogues existent ailleurs au sein, ou non, de la zone de répartition des *green villages* dans le Nord-Ouest européen<sup>34</sup>, et l'extension de l'habitat de dries dépasse, nous l'avons dit, le cadre de la Basse et Moyenne-Belgique.

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<sup>32</sup> La pénurie de renseignements à cet égard est déplorée par K. H. Schroeder (voir *Zur Entwicklung der Ortsgestalt*, p. 74-75, dans: K. H. Schroeder und G. Schwarz, *Die ländlichen Siedlungsformen in Mitteleuropa. Grundzüge und Probleme ihrer Entwicklung*, dans: *Forschungen zur deutschen Landeskunde*, Bd. 175, Bad Godesberg 1969).

<sup>33</sup> H. Uhlig (ed.) et C. Lienau (red.), *Die Siedlungen des ländlichen Raumes. Rural settlements. L'habitat rural*, dans: *Materialen zur Terminologie der Agrarlandschaft. Basic material for the terminology of the agricultural landscape. Matériaux pour la terminologie du paysage agraire*, vol. II, Lenz-Verlag, Giessen 1972.

<sup>34</sup> Voir H. Thorpe, ouvr. cité, p. 108-115.

The first part of the report deals with the general situation of the country and the progress of the war. It mentions the various operations and the state of the army. The second part is a detailed account of the military operations, including the movements of the troops and the results of the battles. The third part discusses the political and administrative aspects of the war, such as the organization of the government and the management of the economy. The fourth part contains the conclusions and recommendations of the author. The report is written in a clear and concise style, and it provides a comprehensive overview of the military and political situation of the country at that time.

The author of the report is a high-ranking military officer, and his perspective is that of a participant in the events. He provides a detailed and often critical account of the military operations, and he also discusses the political and administrative aspects of the war. The report is a valuable source of information for anyone interested in the history of the country and the military. It is written in a clear and concise style, and it provides a comprehensive overview of the military and political situation of the country at that time.

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## CHANGES IN THE RURAL LANDSCAPE OF POLAND TILL 1200 IN THE LIGHT OF ARCHAEOLOGICAL RESEARCH

TERESA DUNIN-WĄSOWICZ AND ZOFIA PODWIŃSKA

**ABSTRACT.**<sup>1</sup> The peculiarity of Polish source materials in relation to Western Europe (till the beginning of the 12th century we can speak nearly exclusively of archaeological materials) induces particular stress on excavation research. Owing to intensive archaeological works, conducted initially by the Management of Studies on the Beginning of the Polish State, and for the following 25 years by the Institute of History of Material Culture, Polish Academy of Sciences, further by the Archaeological Departments of Poland's Universities and Central as well as Regional Museums — the material base has now grown to be an imposing body, exceeding by far the achievements of our neighbours. Comparative materials from Czechoslovakia and the German Democratic Republic already allow to appreciate that kind of sources as the most useful in our research. After having regarded these materials as written documents (very scarce for the area of Poland up to the 13th century), to toponomastic materials, applying retrogressive methods and making use, as far as possible, of specialistic geographic-historical research, we have managed to achieve several synthetic conceptions that give a lively picture of a few particular microregions of Poland (among others the papers of W. Hensel, Z. Hilczer, H. Łowmiański, Z. Podwińska and T. Wąsowicz).

For earlier periods we are trying to reconstruct the rural landscape by studying the diversity of settlement forms and tracing their specific structure. Those forms are closely connected with the natural environment and the type of rural economy. Alterations in the type and intensity of economy are directly reflected in settlement forms and these latter influence changes of the landscape.

We have so far managed to reconstruct the most general picture of settlement reaching back to the 7th century. We note here small settlement groups including some strongholds of various dimensions, i.e. fortified seats of richest representants of tribes. The stability of these seats deserves special attention, they sometimes survived for 400 to 500 years, in spite of wars, fire assaults and destruction, evidencing the progress of stabilization and only insignificant changes in the forms of economy. Besides strongholds there were many non-defence settlements, including a number of 5–7 homesteads, situated at a distance of 500 m to 2 km from the central buildings. Isolated houses as well as short raw settlements were found. The majority of such settlements persisted in one place no longer than from 50 to 100 years, being directly connected with the type of breeding-and-farming economy that required frequent shifting of cul-

<sup>1</sup> This paper has been published in French in *Etudes Rurales*, 61, janvier-mars 1976, pp. 83–89.

tivated areas, due to the exploitation of fertile soil and pastures definitely exhausted by herds of cattle, sheep and swine grazing there season after season.

Archaeological researches achieved in all parts of Poland (Lesser Poland is perhaps least known) allow to attest that till the end of the 12th century we observe another organization of villages, different from that which was established in the late medieval period (14th century). The diversity of forms of rural settlement (buildings standing close to each other, or widely dispersed) was indeed connected with the situation of cultivated fields and the landscape's background. The prevalence of leafy woods (particularly in the middle and northern Poland) and the fertile valleys of large rivers and their tributaries, provided convenient conditions for the development of agriculture and livestock breeding. It was a peaceful coexistence with the natural landscape, neither hindering the laws of nature, nor leading to its swift devastation.

The 13th century brings basic alterations in the outlook of the country. Settlement becomes intense in towns, strongholds and villages and a primitive industrialization begins to change the rural landscape: mills, dams, fishponds act on the balance of ground waters and an exaggerated clearing of forests, particularly in the mountains near the sources of rivers, brings violent floods to the land. A mass shifting of settlement from river valleys to higher territories, safe from flooding, can now be observed.

Only special communication or fortification reasons keep settlements and strongholds in their former low places. That sort of drift in moving to higher spots is observed in Poland already in the 11th century (the region of the river Odra in Great Poland). Such a general tendency cannot yet be ascertained for other parts of Poland, due to the lack of written sources, but similar facts are observed in archaeological research in the region of Berlin and Brandenburg.

On the other hand, the state of settlement formed after alterations in water conditions that occurred in the 13th and 14th centuries and the aspect of villages and urban settlements formed on local laws of that time, have mostly persisted till today and are legible in later cartographic materials, as well as in the present spatial systems.<sup>2</sup>

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<sup>2</sup> T. Dunin-Źasowicz, Climate as a factor affecting the human environment in the Middle Ages, *The Journal of European Economic History*, vol. 4, no. 3, 1975, pp. 691-706.

## TRANSFORMATIONS OF THE RURAL LANDSCAPE IN POLAND DURING THE LAST TWO CENTURIES

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1. The purpose of the following remarks is to present and explain specific characteristics and regional differentiation of the rural landscape in Poland of today. It is rather complex and spatially extremely variable with several layers of completely different forms, types and patterns superimposed one on another. Their origin and dating is rather difficult to identify and their morphology is sometimes very misleading with older forms transformed more or less or not at all by the successive social, economic and political upheavals — revolutions or merely reforms, specially the agrarian ones. By queer paradox the greatest changes have taken place there where at present the agriculture is the most backward and underdeveloped. In search of the historical relicts it is necessary to turn to more advanced and progressive agricultural regions and the foreseeable and planned changes probably shall make this pattern and trends even more deeply implanted in the morphology of the rural landscape.

To explain these phenomena it is necessary to describe basic demographic processes taking place in the 19th and the 20th centuries together with the meanders of the social and economic policies prevailing during this period. These policies were varied not only in time but also in space, regionally because of the changing political international divisions of the whole territory since the end of the 18th century. Polish lands were at that time divided between the three adjoining powerful states — empires. The complete reunification of the whole territory was achieved only in 1945 as the result of World War II.

2. However, the basic factor of all transformations of the rural landscape can be easily identified with the population explosion, a demographic process characteristic for the modern times with their revolutionary changes of sanitary and health conditions. The political factor influenced in reality only the regional diversification of the same basic phenomena.

In Polish lands the population explosion was taking place throughout the whole 19th century and it is now in its final stage of rapidly aging population. The starting-point may be assumed to be the end of the Napoleonic wars in 1815. It is difficult to name the main cause of this explosion. In fact, there were many, all interlocked and interrelated. From our point of view the first to be mentioned is surely the abolishment of the serfdom, partial enfranchisement and distribution of land to the peasants. These meant in reality the liquidation of feudal relations between the gentry and the peasant. The other factors in and of the population explosion were: a period of peace lasting for almost one hundred years; the technological revolution in agricultural production which by creation of the large food reserves had with time (about 1900) eliminated the periodical famines, as well as the improvement in the sanitary conditions which



together with the successful successive elimination of the worst diseases (black death was liquidated practically at the end of the 18th century, small-pox in the middle of the 19th, cholera after 1880, typhoid between 1918 and 1939, and then, finally tuberculosis was mastered in our times, after World War II) has significantly increased chances of survival (raising the average index from about 35 years to, at present, about 70). The scale of the population explosion may be measured by the fact that the number of inhabitants of the present Polish territories has increased about five times during the 19th century. The actual increase would be even larger but for the emigration of the part of population to other countries abroad. In the 20th century in result of the war losses the number of inhabitants remained so far (with some ups and downs) unchanged and probably by the end of the century will increase by no more than one-fourth (25%).

This gigantic increase in the number of inhabitants has taken place mainly in the rural areas, creating very large reserves of manpower there and the overemployment in agriculture. Three roads were open then to solve the new situation: industrialization, urbanization and emigration abroad. This last road was, of course, a hidden form of both industrialization and urbanization. As the Polish lands formed throughout the 19th century the peripheral and underdeveloped provinces of three big and powerful states the road mainly followed was — emigration: to industrialized regions of Germany (mainly the Ruhr Basin) in the Prussian part and overseas, to the Northern and Southern Americas in the Russian and Austrian parts.

As in other countries the industrialization and urbanization proceeded very closely linked together with some mutual, important feedbacks. However, there were some cases when they did not develop simultaneously and at the same rate. In the first case the industrialization preceded urbanization and it cannot be identified with the growth of urban centres (let us call it the “industrialization of the countryside”); in the second the urbanization preceded industrialization. This last case was characteristic for the countries with large surpluses of population, in particular of the population in productive age, when the economic development could not at the same time provide sufficiently large industrial employment.

3. In the Polish territory all these movements: population explosion, emigration abroad, industrialization and urbanization were going on simultaneously — as evident from my earlier statements — but their mix-ups both in time and in space, i.e. their development in succeeding stages (their periodization), their regional variations and combinations were and indeed still are numerous. They were due to political incidence and sustained in the aftermath by the sheer and sharp differences created in the beginning.

The basic division into the succeeding time intervals was nevertheless the same for the whole territory as it was perhaps in the whole or almost the whole Europe. First we have two completely different eras or even epochs divided by an intermediary transitory years from the beginning of the First World War (1914) till the end of the Second (1945) with some twenty years of an uneasy peace (justly named by some historians as those of an armistice) in between. However, further subdivisions are different for various parts of Poland, depending on the political, social and economic vicissitudes of three occupying powers: Prussia (after 1870 Germany), Russia (after 1917 the Soviet Union), and Austria (ending in 1918). After 1918 the remaining division was between the reconstructed Polish state and Germany. In all these states the growth of the capitalist economy and society taking place up till 1914 followed completely different roads.

In Prussia the growth of capitalism was after the Franco-Prussian War extremely powerful, but it was taking place in a close union of the state, the urban bourgeoisie and the big landowners. In result the later processes of industrialization and urbanization were comparatively harmonious, at least so far as the urban and rural relations were concerned. The rural-urban migrations were therefore taking place almost exclusively within the boundaries of the German state and the agriculture was able to keep pace with the technical progress in other branches of economy. Still the Polish lands incorporated during that period into Prussia remained with the exception of some Silesian regions essentially agricultural with big land estates and largest peasant farms dominating over all other forms of agricultural holdings. The agricultural wage workers were increasing in numbers but they were well qualified. The surplus of rural population was being absorbed mainly in the larger industrial and urban regions of Germany proper.

In the so-called Congress Kingdom of Poland (which was established by the Treaty of Vienna in 1815 with the Tsar as the King of Poland and was later incorporated as a province into the Russian Tsarist empire) the growth of capitalism was completely different. First of all, it has taken place almost entirely outside the state activities although some economic policies such as custom duties and the sheer size of the empire provided very strong stimuli for the industrial development. In result the industrialization of some areas preceded their urbanization as well of the whole country. On the other hand, the agricultural production was for Russia, rich with Ukrainian black soils, only of secondary importance, especially as the tsarist government was looking with disfavour on the land estates owned (or managed on the basis of tenure) by the Poles. In result the rural areas remained un- or underdeveloped, all the time sliding backward in relation to the conditions prevailing in other European countries and regions. The emigration which in numbers was twice as big as the influx of migrants into the cities and towns was (as already mentioned) to foreign countries overseas, first to the United States (with two main waves: to Middle-West about 1880 and to the New England after 1905) and later also to the Latin America (mainly to the State of Parana in Brasil).

In the Austrian part the whole situation was again totally different. So-called Galicia was a distinct and peripheral province behind the mountains — the Carpathians, economically secondary and unimportant. However, Poles — in particular the Polish gentry — have comparatively early (after 1866) established for themselves an important role within the constitutional set-up of the whole political life of Austria. They obtained large cultural and even political autonomy which in the field of economy was used principally in support of the interests of larger landowners. With extremely weak industrialization the cities were able to absorb only a small part of the surplus population from the countryside. Here the urbanization was mainly due to the growth of educational and administrative services and it preceded the industrial development. In spite of rather large emigration abroad the number of inhabitants in rural areas was constantly increasing leading to an enormous agricultural overemployment and quite fantastic fragmentation of peasant holdings and fields. Poles from these regions migrated mainly to the North America.

4. After World War I and the re-establishment of the Polish state the whole territory still remained divided, this time only in two parts, one consisting of the new state territory and the other of regions included in the German state. Polish government and indeed the whole community undertook at once some specific measures to re-establish the unity of the national territory; these included the construction of an integrated communication network, the estab-



lishment of standardized administrative division, of the national system of education, health and social services as well as many others. Among these was a scheme of rather radical agrarian land reform. The implementation of all these proposals met with serious obstacles. There existed an absolute priority for the liquidation of war devastations and destruction; a major economic crisis has quickly swept over the whole world; all legislation, even the common law had to be codified as it was formulated according to three different legal systems. Some obstacles were also created by the burdens and the limitations imposed through the international treaties and conventions for the recognition of the reborn state and its frontiers. It is necessary to remember here that by the extension of the state boundaries far to the east, Poland in the inter-war years had become a multinational state in which at once a democratic government turned out to be practically impossible.

5. With World War II Poland has entered a period of a deep economic and social as well as of political and even cultural revolution, out of which a new, strongly integrated and well-knit together, equalitarian community has emerged. By the shift of the state territory to the west with the ensuing exchange, migrations and resettlement of population an unusual homogeneity of the whole society has been achieved. Still the regional variances in the basic equipment both of the urban and rural areas remained unresolved and in reality some new were even added; the areas of war devastations being unevenly distributed throughout the whole country. The first steps of the new regime included a very radical land reform. In the south-eastern and central provinces, first to be liberated, practically all larger land estates were taken over and then split into small homesteads and appropriated to the peasants who formerly often had not possess any land, being the farm labourers. But in the western part of the pre-war Polish territory (regions of Poznań and Bydgoszcz) liberated later with their well-organized land estates and well-trained staffs of agricultural workers, this policy was practically abandoned. Instead, the estates were taken over and established as the state or at the worst the co-operative farms. Finally in the western and northern areas recovered and resettled after the war very large part of the agricultural land was organized on the socialist basis, i.e. either in form of a network of the state farms or of the agricultural co-operatives.

The agrarian policies in the last thirty years were several times radically revised although the main final aim, one of an efficient and highly productive socialist system of agriculture was never changed or abandoned. By now they evolved into a coherent and long-term programme for reconstruction of the whole agriculture. The principal goal is to obtain an increased food production with an evolutionary passage to higher forms of socialist organization. It is to be based in more distant future on a network of the large-scale units of production, highly mechanized and with much lower employment. This is not to be achieved by the administrative pressures but by educating new technically and socially conscious agricultural staffs, composed of younger people. The small peasant holdings are to be slowly integrated into large or even very large farms. The great outflow of rural population to the industrial and urban areas as well as the growth of non-agricultural employment throughout the countryside make this policy possible, indeed natural and necessary. Already there are quite considerable tracts of land abandoned or given out by the elderly peasants to the state in exchange for the old-age pensions. It is characteristic that the full implementation of this programme is to be varied regionally both in time and in space depending on the local conditions prevailing there at present and taking into account all the differences created in the past history.



6. On the basis of this short and extremely schematic review of the economic, social and political history of the Polish rural areas and regions in which I tried to stress its internal variety, let us turn now to their consequences for the landscape itself.

I will not try to reconstruct here in detail the map of the feudal rural settlement and field patterns in Poland as they existed at the end of the 18th century. Practically in all cases they were dominated by the feudal estates with their patrimonial organization and serfdom. The villages were more or less organized around the manors and the most common form of the land cultivation was two- or three-field system. The first great changes have taken place with the first partial enfranchisement and corresponding land division. Here the differences both in time and in space have quickly emerged. As already mentioned, paradoxically the smallest changes in the village and fields patterns have taken place in the Prussian part of the country because there the reform was carried out with and for the interests of land estates, which, however, had modernized their techniques of cultivation and their organization. There the traditional patterns were preserved although modified to fit the different social and economic structure and needs. Therefore, these areas are still the easiest for the study of the relicts of historical settlements and fields.

The situation, as may be easily imagined, was quite different in the Russian part which is now largely the most underdeveloped or even backward. Its spatial patterns were heavily modified in the second half of the 19th century and the historical forms of settlements largely obliterated. This was because the agrarian reform, specially the enfranchisement of peasants and land division were carried out by the Russian authorities with the purpose to undercut the political and economic independence of the manors owned by Polish gentry and to obtain the confidence and the backing of the peasants (it should be added here that this last policy turned out to be an utter failure). The new forms of settlement and field patterns were created by the surveyors rather limited in their abilities and the technical and social imagination. This may easily be observed in the landscape, the best and the easiest way being from the air or by the air-photographs.

The village patterns and the landscape have changed again differently in the Austrian part of the country where the urbanization preceded industrialization. Here even with large emigration abroad the countryside became overpopulated and with the great densities of population prevailing, the peasant homesteads became increasingly fragmented. The development of the chequer-board (in reality in the very narrow elongated strips) patterns were pushed up to the most unusual extremes and the rural settlement became, on one hand, very dense and, on the other, very dispersed. Today the old forms of villages, mainly in the form of the so-called *Hufendorf* pattern are still existing as the settlement skeleton in the densely developed countryside.

Both in the Russian and the Austrian parts certain efforts towards some reallocation of lots, fields and homesteads were undertaken later but without greater results.

The inter-war years with their half-hearted implementation of the more radical agrarian reforms have achieved specific results in promoting further dispersion of the settlement, most of the houses and outbuildings being built within one intergrated piece of land, given or sold to the peasant-farmer. This form is specially visible in the northern part of Central Poland where the land estates, established at the beginning of the 19th century under the German policies of forced inner colonization were divided in the inter-war period between the Polish peasants in form of an unopposed implementation of the

general agrarian reform. In addition, some intensive growth of suburban settlement with its specific forms of vegetable and fruit market production has taken place around the largest cities. The most characteristic and the biggest is the suburban zone of Warsaw. Here very large role was also played by the speculative division of large tracts of forests into building lots. Generally speaking this whole period may be described as one of the dispersal of the rural as well of the suburban settlements.

During the last thirty years several actions to contain such dispersal or even towards the concentration of rural settlement into larger and integrated villages were undertaken, however, without any outstanding success. The last reform of the administrative division with its establishment of larger rural communes, each with a definite designated main service centre was introduced with similar aim in mind but it is still too early to speak of its actual impact and results.

To sum all these short but widely ranging comments one fact should be stressed once more: to understand the genesis of the present rural landscape in Poland it is necessary to study the successive agrarian reforms in detail from the point of view of their consequences for the forms of settlement and patterns of fields. Without such studies some conclusions pertaining to the earlier feudal rural patterns are premature and may be easily completely mistaken. The impact of the agrarian reforms dating from the 19th century was in this case decisive. The present century has so far only developed and added to the trends crystallized then. New changes, perhaps much more radical, may be expected in the coming two or three decades — their patterns, however, are yet not clearly crystallized and visible.

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## LES "PLACÎTRES" EN BRETAGNE

PIERRE FLATRÈS

## INTRODUCTION; DÉFINITIONS ET TERMINOLOGIE

Le mot "placître" est un terme de la France de l'Ouest qui, dans certains parlars et dans l'usage juridique régional désigne le même type d'espace que les Anglais appellent *green*, les Allemands *Anger*, les Danois *forte*. Il s'agit d'un espace vert, herbeux, situé au centre ou aux abords d'une localité agricole (village, groupe de fermes, *clachan*) et dont l'usage primitif était essentiellement agricole. Le *placître*, de la sorte, s'oppose à la *place*, espace libre au sol compacté, macadamisé, pavé ou bitumé, aux fonctions essentiellement non-agricoles, et se trouvant en général au centre d'une localité non-agricole (ville ou bourg).

Le terme *placître* est quelquefois remplacé dans l'usage parlé de la Haute-Bretagne par le most *placis*. En Bretagne bretonnante, l'on utilise le terme *leurger*, ou l'une ou l'autre de ses variantes dialectales. Ce terme est formé de *leur*, aire, et de *ker*, habitat, ville ou village. Il ne faudrait pourtant pas traduire *leurger* par *air de village*, au sens agraire d'espace où l'on bat le blé<sup>1</sup>. Leur, aire a ici le sens plus général d'espace plan, libre, acception qu'il a dans l'autre composé *leurzi*, sol (en terre battue) d'une maison. Dans les parlars bretons, *leurger*, *placître*, s'oppose à différents termes désignant la *place*, dont le plus courant est *plasen*, mot d'emprunt français. Localement on emploie aussi le terme *tachen* dont le sens général courant est *parcelle*.

## DESCRIPTION DES PLACÎTRES

Nous prendrons comme type le placître villageois, celui qui est associé à un village, c'est-à-dire, dans la terminologie rurale de l'Ouest de la France, que nous suivrons constamment dans cet article, un habitat agricole, groupe de fermes, *clachan* plus ou moins important, qui peut même s'être réduit à une ferme isolée. C'est là le type de base, qui a été plus ou moins modifié lorsqu'il a été associé à d'autres éléments (sanctuaires ou bourgs).

Le plan des placîtres est en général triangulaire, avec assez souvent un ou plusieurs côtés curvilignes. Parfois le plan est oblong, avec un resserrement dans le milieu, comme s'il s'agissait de deux triangles raccordés par le sommet. Les plans ovalaires ou nettement quadrangulaires paraissent exceptionnels, de même que les plans en étoile. Contrairement à certains *greens* anglais, le

<sup>1</sup> Bien que certains *leurger*, comme à Elliant (Finistère) aient pu être utilisés comme aire à battre.



plan ne donne jamais l'impression d'avoir été tiré au cordeau, selon une figure géométrique régulière.

La superficie des placîtres est en général minime: quelques dizaines d'ares, parfois moins. Les placîtres de un hectare et plus, sont exceptionnels et remarquables.

Les placîtres sont toujours bordés de *talus* (au sens où ce mot est utilisé dans l'Ouest de la France, c'est-à-dire de levées de terre), ou de murs de pierres sèches. Les talus peuvent être nus, ou porter une végétation de lande (fougères, ajoncs), arbustive, ou arborée (taillis ou arbres de haute venue). Plus caractéristique est la dissymétrie fréquente de la clôture, le côté bordant le placître étant souvent plus raide que l'autre et renforcé selon diverses méthodes de construction. Par exemple, les talus peuvent être revêtus de pierre ou armés de dalles mégalithiques du côté du placître.

Enfin les placîtres, en général, sont en libre communication avec les chemins d'exploitation d'un côté, avec les cours et voies du village de l'autre. Il n'y a en général pas de barrière aux issues des placîtres. Les chemins traversent le placître par rapport auquel ils sont non-clos, non-bordés de clôtures. En dehors des chemins le placître porte une pelouse herbeuse ou une végétation de lande.

## PLACÎTRES ET HABITAT

1. *Placîtres villageois.* Comme on l'a dit, la plupart des placîtres sont associés à des groupes de fermes ou clachan, habitats purement agricoles. Mais ils peuvent être localisés différemment par rapport aux villages. Ils lui sont en général adjacents. Ce sont, réellement, les *issues* des villages. Le terme "issues" est d'ailleurs quelquefois utilisé pour les placîtres dans les documents notariaux. Parmi les placîtres triangulaires, les uns touchent le village par un sommet, les autres par une base. Ce trait peut être lié au plan linéaire ou nucléaire, du village.

Il est tout-à-fait exceptionnel que le placître ait une position centrale par rapport au village. C'est le cas du très beau placître de Montomblet en Sains (Ille-et-Vilaine). Un autre exemple, hors de Bretagne, mais non loin de la limite provinciale est celui de Méray en Fougerolles-du-Plessis (Mayenne).

2. *Placîtres et chapelles.* La plupart des multiples chapelles qui parsèment la campagne bretonne se trouvent situées sur un placître, que ces chapelles soient complètement isolées, ou qu'elles soient associées à un village. Il est en effet extrêmement rare que ces chapelles soient situées au milieu d'un champ ou simplement en bordure d'un chemin.

Par la situation par rapport aux villages ou aux chemins, par la forme, par la superficie variable, ces placîtres de chapelles ne se distinguent pas fondamentalement des placîtres villageois. En revanche, fréquemment, certains traits spécifiques les mettent à part. Il arrive en effet que, à l'intérieur du placître, la chapelle soit isolée dans un enclos, formé d'un mur de pierres sèches ou appareillées, enclos dans lequel on pénètre soit par une barrière, soit par un échalier, et parfois même par un portail monumental. Cet enclos sacré qui peut contenir, en plus de la chapelle un calvaire et une fontaine, a pu autrefois être aussi un cimetière. Le cas est certain pour certaines anciennes églises paroissiales déchuées (Perguet en Bénodet, Finistère). Les rapports de l'enclos, lorsqu'il existe, et du placître, sont très divers. L'enclos peut ne couvrir qu'une fraction du placître. Au contraire parfois il est presque aussi étendu que le placître qui n'est plus représenté que par un chemin bordant un ou deux côtés de l'enclos. Ceci est souvent le cas dans les régions de champs ouverts

(mêjou), du littoral (exemple de la chapelle de Penhors en Pouldreuzic, Finistère). A plus forte raison l'enclos se confond avec le placître dans les chapelles situées au milieu de landes ouvertes (chapelle de St Tey en Clédén-Cap-Sizun, Finistère).

Qu'il comporte ou non un enclos, le placître de la chapelle est très généralement planté d'arbres, à moins que le milieu physique ne s'y oppose (littoraux exposés, sommet des montagnes atlantiques). Chênes, hêtres ou ormes en lignes ou en allées, constituent par leurs fûts les colonnes, par leurs branches les voûtes d'un vaste monument végétal qui entoure et domine parfois l'architecture humaine de la chapelle.

3. *Placîtres et bourgs*. Toute la France de l'Ouest distingue soigneusement les *villages*, habitats purement agricoles, groupes de fermes, parfois même fermes isolées, et les *bourgs*, chef-lieux de paroisses ou de communes, d'importance très variable, mais qui ont essentiellement une fonction tertiaire.

La plupart des bourgs d'une certaine importance comportent une ou plusieurs places (*plasen*), à sol compacté ou bitumé et à fonction commerciale (marchés hebdomadaires, et lieu des principaux commerces permanents du bourg). Mais l'agglomération du bourg, en s'étendant a pu rejoindre un groupe de fermes, un village proche, qui avait son propre placître villageois. Un placître d'origine agricole a pu ainsi être incorporé à la structure du bourg. Il conserve son nom de *leurger* en Bretagne bretonnante, par opposition aux *plasen* ou *tachen* du centre du bourg. Ainsi le bourg d'Elliant (Finistère) comporte auprès de l'église deux places: *tachen an neh* (place du haut) et *tachen an traon* (place du bas), places carrées, et, à l'autre extrémité, une placette rectangulaire, au sol aujourd'hui bitumé, et entourée de maisons, mais qui est connue sous le nom de *leurger* (prononciation locale: *leuyer*). Il s'agit d'un ancien placître villageois, aujourd'hui absorbé et métamorphisé par le bourg.

Une évolution analogue peut expliquer la structure remarquable de certains gros bourgs, d'autant plus que dans certains cas, le village à placître pouvait être tout proche de l'église (mais il avait alors en général son nom propre, différent de celui de la paroisse). Le bourg de Pleyben (Finistère), est remarquable par sa vaste place triangulaire, dont l'un des sommets correspond à l'enclos paroissial. Or cette place est appelée *leurger*. Ici aussi plan et nom font penser à un ancien placître de village agricole, à l'origine distinct du bourg paroissial, mais très proche, gagné par l'extension du bourg et métamorphisé sur place.

## DROITS, USAGES ET FONCTIONS

1. *La propriété des placîtres*. Les placîtres de bourgs sont incorporés à la voirie communale. Les placîtres de chapelles, ou, tout au moins, les enclos entourant la chapelle ont une situation juridique variable, qui s'explique par la vente des biens d'église au moment de la Révolution et par toutes les péripéties subies depuis par ces biens. La situation la plus "normale" est que la chapelle et son enclos, ou son placître soient propriété communale, comme l'église paroissiale. Certaines chapelles sont actuellement propriété privée, mais il ne semble pas qu'il existe de chapelles propriété commune d'un village.

Les placîtres villageois, en règle générale, sont terre commune, *commun*, comme on dit dans l'Ouest. Ces *communs* (en breton *douar boutin*) comprennent parfois, outre les placîtres, des bouts de landes, et beaucoup plus rarement des bois. Dans beaucoup de cas, et notamment dans les communes non-littorales, ces communs, placîtres ou autres, sont considérés officiellement comme propriétés sectionales, c'est-à-dire qu'ils appartiennent à des sections de communes et non à l'ensemble de la commune. En fait, en Bretagne, elles relèvent en



général, non pas d'une section à proprement parler, mais, comme l'indiquent les documents cadastraux, d'un village, au sens occidental du terme. Sur les documents cadastraux, les terres communes sont marquées tantôt au nom du "village de X...", tantôt au nom des "habitants du village de X...". Certains veulent voir entre ces deux dénominations des distinctions juridiques, qui n'existent pas, semble-t-il dans l'esprit des habitants. Dans les communes littorales, sans doute plus habituées aux propriétés communales et aux droits économiques exercés dans le cadre d'une commune, les communs, où qu'ils se trouvent, sont devenus propriété communale (exemple: commune de Fréhel, anciennes communes de Plévenon et Pléhérel, Côtes-du-Nord)<sup>2</sup>. La propriété communale des communs est aussi fréquente dans la vaste commune forestière intérieure de Paimpont (Ille-et-Vilaine). Mais ici, dans certains cas, par une particularité curieuse, la commune ne possède que la nue-propriété des communs villageois, la jouissance revenant aux différents *villages* (qui ici d'ailleurs correspondent à de véritables sections communales).

Enfin, il faut noter que les petits placîtres ne forment pas toujours parcelles cadastrales, et sont considérés comme de simples élargissements de chemins ruraux ou communaux.

2. *Les droits d'usage et les fonctions.* On n'a nulle part en Bretagne signalé d'organismes spéciaux chargés de gérer les biens sectionaux, comme il en existe dans le Massif Central. A Moncomblet en Sains, il existait une certaine organisation communautaire autour du placître, mais qui était seulement officieuse. La faible extension de la plupart des biens villageois, et le petit nombre des familles villageoises détentrices de droits, expliquent qu'on n'ait jamais jugé nécessaire d'établir une organisation spéciale pour gérer ces biens.

Dans les périodes récentes, d'ailleurs, l'usage des placîtres était extrêmement réduit: passage des troupeaux entre l'étable et la pâture, rarement pâture temporaire d'une ou deux bêtes, soit sous surveillance, soit à l'attache, dépôts de tas de bois, de fagots, de meules, parfois garage d'instruments agricoles... En fait, tout ceci est ressenti comme une survivance, et l'absence d'une organisation de la gestion, si légère soit elle, a favorisé, comme on le verra, les empiétements individuels.

Autrefois les placîtres villageois ont été, comme les greens anglais, le théâtre de compétitions sportives entre jeunes du village: jeux de crosse (*baz-ten* en breton), courses, ou servi de point de départ ou de but au jeu de soule. Aujourd'hui, en général seules quelques allées de boules rustiques, quelques jeux de quilles, encore plus rustiques, comme au bord de la Baie d'Audierne, témoignent de ces anciens usages. Les placîtres sont aussi le lieu des feux de la Saint-Jean là où cette pratique est encore suivie. Mais l'on trouve aussi des jeux de boules ou de quilles, et l'on allume des feux de Saint-Jean au bord de chemins, à des carrefours, en dehors de tout placître. Des célébrations plus élaborées, autour d'un arbre de la liberté ont existé à Moncomblet, déjà cité.

Les placîtres de chapelle ont en revanche une affectation religieuse encore vivante. L'enclos et les allées de grands arbres servent de voie processionnelle le jour du "pardon". A cette occasion des boutiques en plein vent, des débits de boisson sous tente s'installent aussi sur le placître qui accueille la foule des "pardonners" et leurs véhicules. Autour des grandes chapelles de pèlerinage (Rumengol, Le Folgoet, dans le Finistère), le placître a été étendu en une vaste esplanade pour les processions et les offices de plein air.

En temps ordinaire, les placîtres des petites chapelles retrouvent leur aspect et leur affectation agricole. Les vaches y passent, une bête peut y être mise

<sup>2</sup> Travaux en cours de M. Bouliou sur les terres communales en Bretagne.



à l'attache. Un tas de fagots se dresse dans un coin. Seul l'enclos sacré, fermé par des barrières ou des échaliers est vraiment interdit à tout usage agricole, et surtout au passage des bêtes.

Les enclos de chapelles n'ont pas toujours été aussi strictement interdits à tout usage profane. Certains ont même été autrefois affectés à un usage commercial temporaire: marchés ou foires<sup>3</sup>. Cette exception à la règle de l'usage agricole des placîtres ne doit pas nous étonner. Il s'agit en fait d'une localisation en pleine campagne, voire en pleine nature de fonctions ordinairement exercées dans des villes ou bourgs. Elle est à rapprocher de la tenue de foires au sommets de montagnes désertes, comme le Ménè-Bré.

Quant aux placîtres absorbés par des bourgs, ils ont perdu toute fonction spécifique et peuvent être assimilés aux places ordinaires.

#### GENÈSE ET DEVENIR DES PLACÎTRES

Lorsque l'on consulte les anciens cadastres du 19<sup>e</sup> siècle ou les rares plans du 18<sup>e</sup> siècle qui sont parvenus jusqu'à nous, l'on ne peut manquer d'être frappé par l'ensemble structuré que forment, en certaines régions, le *village*, son *placître*, et un ou plusieurs chemins menant à des *communs* incultes (landes, dunes littorales, etc.). Le dessin rappelle parfois d'assez près celui de certains ensembles protohistoriques.

Cette structure évoque le déplacement régulier, peut-être journalier des troupeaux entre le village et les pâtures communes. Le placître apparaît comme une extension de ces pâtures, un diverticule allant jusqu'au village assurant la libre circulation entre le village et le commun, sans menacer l'espace cultivé, que protègent précisément les talus renforcés, armés d'un revêtement protecteur du côté du placître, du côté où passaient ou séjournaient les bêtes.

La comparaison des dispositions de divers placîtres, et l'examen des structures parcellaires environnantes permet de reconstituer, au moins dans certains cas, l'évolution suivante.

1. Le village s'est établi en limite de l'espace cultivé et des incultes communs.

2. Des défrichements ont peu à peu étendu le finage cultivé du village aux dépens des incultes communs. Mais il était essentiel de laisser libre un espace commun entre le village et la grande masse du commun. Les défrichements ont donc respecté un diverticule du commun entre le village et la grande masse des incultes.

3. Ce diverticule du commun atteignant le village a été lui-même rétréci en son milieu par de nouveaux empiètements créant de nouveaux champs. Il a pris une forme rétrécie en son centre et doublement évasée, vers les communs d'une part, vers le village d'autre part. Cette partie évasée vers le village est déjà un placître. Si les conquêtes des défrichements continuent, la partie rétrécie entre placître et commun se transforme en chemin, plus ou moins long. Le placître apparaît alors comme une annexe du village reliée par un chemin à ce qui reste d'inculte commun. C'est l'état que nous montrent plusieurs plans du 18<sup>e</sup> ou du début du 19<sup>e</sup> siècle. Finalement, le commun lui-même a pu être défriché; le placître demeure alors seul témoin des anciennes terres communes.

<sup>3</sup> M. Duval, *Erections et confirmations de foires et marchés en Bretagne sous les règnes de Henri IV et de Louis XIII (1592-1642)*, Mémoires Soc. Hist. et Archéol. Bretagne, 52 (1970-1974).

D'autres processus sont possibles en certains endroits: par exemple, le maintien au milieu des terres cultivées, d'un flot inculte, sur un affleurement particulièrement infertile, à proximité d'un village.

Quel que soit le processus, dans la généralité des cas, les formes des placîtres et les structures parcellaires environnantes évoquent une création graduelle, spontanée. Les placîtres bretons diffèrent beaucoup ainsi des créations voulues, planifiées, que furent à l'évidence certains des beaux greens rectangulaires anglais. Mais ils se rapprochent beaucoup des structures semblables répandues à travers tout le monde atlantique, en Galice, dans l'Ouest britannique, et peut-être même en Norvège.

L'évolution actuelle semble aller vers la disparition des placîtres, sauf les principaux placîtres de chapelles. Ces derniers sont protégés, pour le moment, et par leur fonction religieuse, et par la législation sur les sites (périmètre de protection autour des monuments classés).

Les processus de disparition des placîtres villageois sont divers:

Le plus simple est l'appropriation de tout ou d'une partie du placître par les riverains. Au début l'on a mis un tas de fagots, ou une meule de foin. Ensuite l'on a établi autour une clôture sommaire, puis l'on a pu construire un bâtiment en dur, bâtiment d'exploitation ou maison d'habitation. Lors d'une révision cadastrale ces empiétements ont pu être consacrés par le plan parcellaire et les autres documents cadastraux sans que personne trouve à y redire et fasse d'objection, tant est devenue grande l'indifférence de la plupart des habitants des villages à l'égard des communs. Dans certains cas cependant les autorités cadastrales ont réagi contre certaines prétentions des riverains qui insistaient pour payer l'impôt foncier sur le placître villageois, dans l'idée que ce paiement les ferait considérer comme propriétaires. On a signalé récemment un empiétement non pas arrêté mais limité par compromis entre la commune propriétaire, et un particulier qui avait en toute bonne foi édifié une maison sur un terrain qu'il croyait lui appartenir.

Un autre processus, plus récent et plus rapide est le remembrement. Si les placîtres sont biens sectionaux, et à moins qu'ils ne soient exclus du périmètre de remembrement, ils seront versés dans la masse foncière des habitants du village, et disparaîtront lors de la redistribution des terres. Si les placîtres sont bien communaux, ils risquent de disparaître aussi, mais non sans contrepartie au profit de la commune. En effet, dans ce cas, les biens communaux formeront une masse, dont la commune demandera la localisation aux abords du bourg, pour former une réserve foncière communale, qui pourra être affectée à un terrain de sport, à un camping, etc.

En revanche, lorsque les placîtres ne sont pas cadastraux, leur reconnaissance par la commune comme emprise de chemins ruraux est possible. Ils entrent alors dans le domaine de la voirie communale et peuvent encore être sauvés. Un autre danger, toutefois, menace leur aspect traditionnel: c'est le bitumage, pour faciliter l'accès des camions de laiteries, ou, tout simplement pour former des parkings (chapelle de Locmaria en Quistinic, Morbihan).

## CONCLUSION

Les placîtres bretons évoquent, par leur forme, par leur aspect, par le régime de propriété, par leurs fonctions passées, le plus ancien passé agraire de la Bretagne. Ils ont été liés à une communauté villageoise qui, avec le dépeuplement rural et la modernisation agricole, s'est étiolée et a pratiquement disparu. Les principaux aménagements agraires en cours, les remembrements, risquent d'en accélérer la disparition. Il y a pourtant place, dans un aména-

gement rural global, pour ces espaces communs reliés par un réseau de chemins à ce qu'il peut rester d'espaces communs ou incultes. Ces structures ne peuvent plus servir à une économie agricole de plus en plus industrialisée. Mais elles peuvent être consacrées à des fonctions de conservation de la nature ou de récréation (circuits pédestres ou équestres). Dans un espace agricole de plus en plus strictement fonctionnel, elles peuvent maintenir un espace "naturel" ouvert à l'ensemble du public.

Université de Rennes II



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lucratif" ouvert à l'ensemble du public.

Université de Louvain 1974

## ÉVOLUTION DES PAYSAGES EN FLANDRE INTÉRIEURE FRANÇAISE (XIX<sup>e</sup>-XX<sup>e</sup> SIÈCLES)

CHRISTIANE FOUTREIN

Portion de la frange atlantique européenne des bocages et du bassin anglo-flamand, la Flandre intérieure, jadis "flamingante" et appelée Houtland, est circonscrite par l'ancien littoral, l'Aa, la plaine de la Lys et la frontière franco-belge. C'est un pays aux traditions polyculturelles solidement établies. Certes quelques aspects physiques contribuent à son unité, mais les populations rurales ont principalement accentué son originalité.

Région agricole, la Flandre possède des particularités qui la distinguent des autres divisions départementales. Les exploitations diminuent très modestement en nombre. Dans le domaine économique, elles évoluent remarquablement, mais sans bouleversements brutaux. On y intensifie les systèmes de culture et d'élevage, fait qui classe la Flandre au premier et au second rang départemental pour l'essentiel des productions. Les progrès de la céréaliculture et particulièrement ceux de l'élevage sont typiques du Houtland. L'économie individualise la région. Le type d'habitat lui confère-t-elle un caractère particulier?

### DESCRIPTION DU PAYSAGE DE CES DEUX DERNIERS SIÈCLES

#### LE PAYSAGE ACTUEL

*L'habitat.* Pays longtemps boisé, la Flandre se classe toujours parmi les régions d'habitat dispersé. Cependant des contrastes existent entre les communes dans la répartition et la densité des sites d'habitat. La cartographie des densités n'est pas spécialement révélatrice. Par contre, le mode de répartition de l'habitat rural est plus typique. En certaines communes, les fermes se pressent autour des chefs-lieux, leur nombre diminuant à la périphérie du finage. Pourtant la généralisation du phénomène s'avère impossible. En effet, l'inégale dispersion dépend, dans une certaine mesure du réseau routier. L'habitat s'égrène assez régulièrement le long des chemins rectilignes, telles les voies romaines centrées sur Cassel. Parfois, des routes convergentes imposent un mode particulier de répartition: auréoles concentriques ou organisation semi-circulaire. Ailleurs, le réseau routier influence moins l'implantation de la maison humaine. Il arrive qu'une disposition circulaire de l'habitat ne s'accompagne pas d'un réseau stellé. La route ne fixe pas nécessairement l'habitat agricole qui s'isole parfois à l'intérieur des prairies perdues dans les *velden*, ensembles parcellaires de terres labourables.

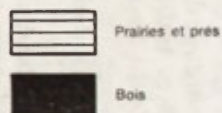
l'agencement des masses culturelles, élément sur lequel nous insisterons davantage. Les divers modes d'assemblage des labours, des prairies et des bois, singularisent les plaines faiblement ondulées et les collines tertiaires qui constituent la Flandre.

Les particularités du paysage sont fournies par le réseau routier, l'habitat et



<http://rcin.org.pl>





Localisation des types

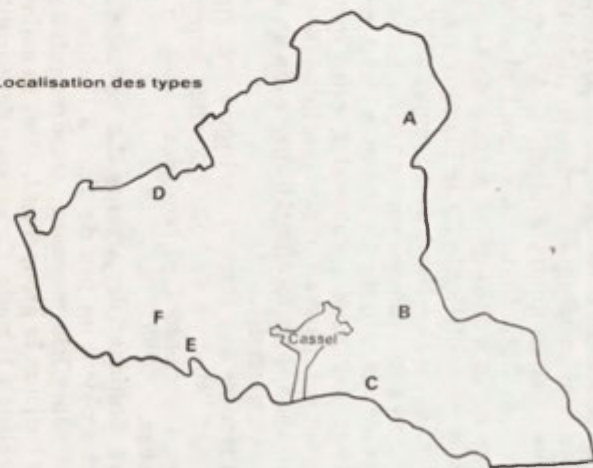


Fig. 1. Types de paysages, 1804  
 A — Terroirs herbagers émiettés. Bois résiduels; B — Terroirs contrastés; bois étendus, vastes pâtures; C — Paysage plus ouvert. Rareté des bois. — Prairies aux formes et superficies importantes; D — Prairies et bois de taille variable; E — "Velden" plus étendus; F — Prairies en coulées

*La prairie, élément diversifiant.* Le paysage forestier primitif fait partout figure de relique, sauf sur quelques pentes des collines et en de rares secteurs de plaine. En 1975, l'arbre n'est plus un critère de diversification des paysages qui se caractérisent davantage par le pourcentage du territoire réservé à l'herbe. Les dernières statistiques agricoles (1970-1971) permettent une classification des communes en quatre catégories. A l'extrême Sud et aux confins occidentaux, plus de 31% du territoire sont réservés à l'herbe. Ailleurs, les prairies couvrent de 26 à 31% de la surface de la majorité des communes. Cependant, la portion septentrionale de la Flandre a moins de 26% de ses terres encloses de haies. Enfin, au Nord de l'Yser et à l'Est de la voie romaine passant par Wylder, les pourcentages sont compris entre 14 et 20.

Cette diversité dans l'affectation des terres s'accompagne d'un agencement particulier des masses culturales, plus spécialement des enclos de prairies. L'émiettement plus ou moins accentué des herbages, leur ubiquité ou leur concentration, leur localisation par rapport aux chemins, sont des critères essentiels de diversité.

*Des finages aux terroirs herbagers très émiettés.* La singularité du Nord-Est repose sur l'absence de bois, l'extrême morcellement des prairies de moyenne étendue, fragmentées au bord des routes ou isolées à l'intérieur des quartiers de labours.

*Type dominant de paysage.* Le paysage s'altère graduellement. Le labour et l'herbe cèdent un peu de place à l'arbre. Quelques communes possèdent des bois de superficie moyenne. Quadrangulaires, les prairies de taille variable évitent toujours le groupement. Elles se maintiennent à l'intérieur des quartiers ou s'accolent à la route. Ce paysage de transition se repère dans une grande partie du Houtland.

*Bois plus grands, prairies multiformes.* Les localités voisines du Mont des Cats présentent un troisième type de paysage. Les bois gagnent du terrain sans affirmer de prédilection pour les pentes les plus fortes. Seul le Mont-Noir se coiffe d'arbres. L'irrégularité et l'anarchie prévalent dans la répartition des prairies. En outre, la disparité des formes caractérise cette région. Le groupement de certaines masses en herbe s'oppose au déchiquetage d'autres surfaces pâturées.

*Coulées et ramassis de surfaces en herbe.* Au Nord-Ouest, les prairies et labours se combinent différemment. Les herbages se concentrent, s'agglutinent en blocs. Leur allure ramassée libère des labours de taille très inégale. Parfois la compacité des herbages en bordure des chemins est le caractère dominant de l'Ouest de la Flandre. D'épaisses traînées de pâtures contigües jalonnent les routes. La bordure méridionale du Houtland associe les deux types précédemment décrits.

Les causes des nuances perçues dans la structure des paysages dépendent-elles des conditions naturelles? Le milieu naturel est à peu près homogène quant à la nature du sol. La Flandre est un pays aux terres humides, aux assises argileuses épaisses. Les formes topographiques se diversifient davantage et ont une relative importance. Malgré cette constatation, les facteurs physiques n'ont pas joué un rôle capital dans l'élaboration de ces paysages.

1800, LE HOUTLAND: "UN IMMENSE JARDIN... PLANTÉ DE PLUSIEURS MILLIONS D'ARBRES FORESTIERS ET FRUITIERS" (DIEUDONNE)

La description du paysage du début du XIX<sup>e</sup> siècle s'impose avant la mise en parallèle avec celui que nous connaissons.

*Dominante de labours.* La portion Nord-Est se caractérisait par l'aspect résiduel des bois. De la vieille sylve fragmentée progressivement, ne subsistaient

en 1800 que de minuscules bosquets dispersés dans tout le finage (Fig. 1). Leur superficie très réduite s'accroissait cependant aux abords de l'Yser. La disposition des terres labourables et des prairies individualisait aussi ce secteur. Des masses compactes de prairies et de prés occupaient les secteurs asséchés, mis en culture plus récemment. Ailleurs, les prairies s'isolaient au bord des routes et se pulvérisaient à l'intérieur des quartiers limités par les chemins, s'insinuaient parmi les champs, trouant les labours de taches verdoyantes.

*Des terroirs plus contrastés.* Ce premier type de paysage s'altérait graduellement, dans la frange orientale, au Sud de l'Yser. L'herbe et l'arbre se partageaient différemment la finage, réalisant une combinaison plus contrastée des terroirs. Prairies quadrangulaires, bois hétérogènes par leurs dimensions, réseau routier au tracé sinueux, structuraient les finages autrement qu'au Nord de l'Yser. De grandes masses d'arbres s'opposaient aux bois moyens et aux boqueteaux. Leur répartition invite à la réflexion. Certaines communes rurales avaient relégué les bois aux confins du terroir cultivé. Les arbres ser-

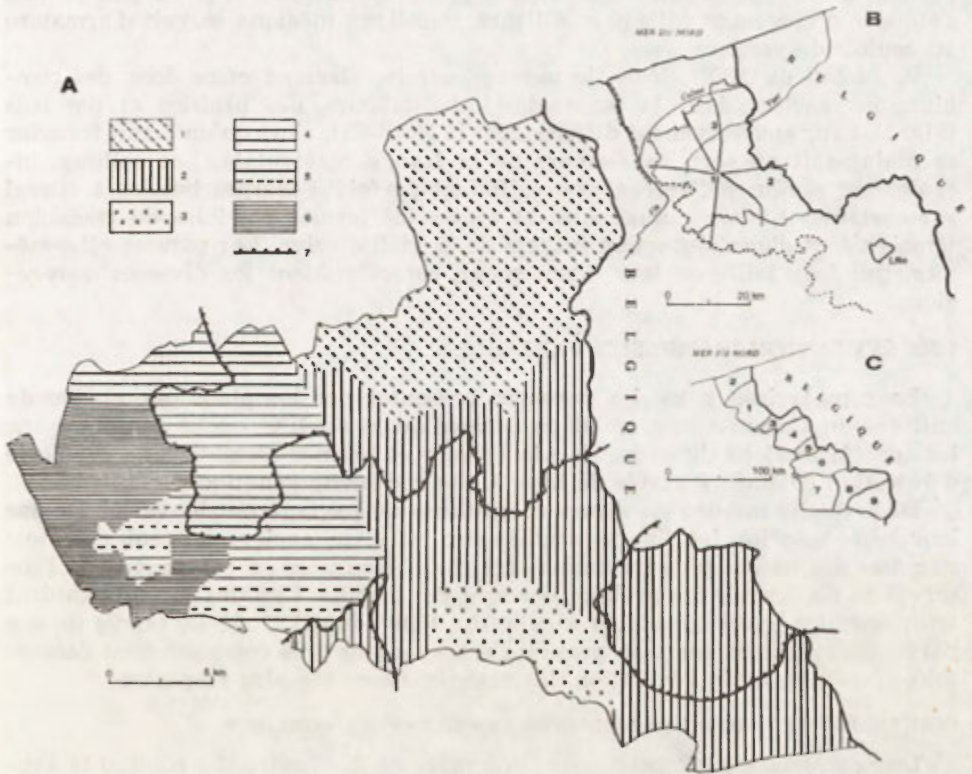


Fig. 2. Paysage au début du XIX<sup>e</sup> siècle

A: 1 — Prairies peu étendues, régulièrement réparties. Bois résiduels; 2 — Paysages contrastés: prairies de toutes tailles, fragmentées ou en masses. Bois plus importants; 3 — Paysage plus ouverts. Bois rares et peu étendus; 4 — Prairies fragmentées, de taille variable, plaquées au bord des routes. Bois de taille variable; 5 — Prairies au bord des routes, "velden" plus étendus. Bois de taille variable; 6 — Prairies massives, étendues en coulées. Bois de taille variable, irrégulièrement répartis; 7 — Points dirigés vers la zone de répartition régulière des bois.  
 B: 1 — Cassel, 2 — Mt des Cats, 3 — Wylder. C: 1 — Flandre Intérieure, 2 — Flandre Maritime, 3 — Plaine de la Lys, 4 — Région de Lille, 5 — Pévèle, 6 — Plaine de la Scarpe, 7 — Cambrésis, 8 — Hainaut, 9 — Thiérache



vaient-ils de marche-frontière, accentuant le cloisonnement par l'existence de ce *no man's land* boisé?

*Irrégularité dans la répartition des masses culturales.* Aux abords du Mont des Cats, les bois couvraient une plus grande superficie. De vastes pâtures, émaillées de nombreuses chaumières constituaient un troisième mode d'entente des éléments du paysage. Au début du XIX<sup>e</sup> siècle, les masses boisées importantes ne se moulaient pas nécessairement au sommet des collines, exception faite du Mont Noir.

*Paysages plus ouverts.* A cette région qui méritait encore le nom de Houtland, succédaient des villages bien pourvus en terres cultivées. Disparition quasi-totale des bois, répartition irrégulière des prairies d'étendue moyenne, individualisaient ce quatrième type de paysage, repérable entre le Mont Cassel et le Mont des Cats.

*Des prairies aux formes et superficies imposantes.* A l'Ouest, prairies et labours s'associaient différemment. D'épaisses traînées de prairies se plaquaient sur un réseau quadrillé ou soulignaient un réseau routier stellé. Des masses de pâtures régulièrement disposées dans le finage s'allongeaient peu à peu jusqu'à s'étendre d'une route à l'autre. Ailleurs, une ligne médiane servait d'armature au couloir de verdure.

Au début du XIX<sup>e</sup> siècle, le paysage agraire flamand offre donc des combinaisons variées dans la marqueterie des labours, des prairies et des bois (Fig. 2). Leur amenuisement différençait le Nord-Est, alors qu'un écran forestier se maintenait en certains secteurs de la frange occidentale. Les collines, inégalement revêtues d'arbres, s'en coiffaient parfois. Echarpes boisées à cheval sur certaines limites communales et toutes les formes possibles de transition témoignaient d'une régression inégale de la vieille sylve. Les pâtures elles-mêmes, par leur taille ou leur agencement, caractérisaient les diverses sous-régions.

#### UNE ÉVOLUTION D'AMPLEUR VARIABLE

La comparaison entre les paysages présentés par les plans par masses de cultures du Consulat et ceux de ce dernier quart du XX<sup>e</sup> siècle, renseigne sur les transformations du cadre de vie agraire et permet d'établir une typologie d'évolution destinée à servir de base à une recherche génétique.

Dans quelle mesure les divers composants du paysage ont-ils varié? De par leur hétérogénéité, les finages étudiés sur les plans anciens laissent entrevoir une transformation plus ou moins accentuée. Deux cas se repèrent dans l'observation du devenir des prairies, des bois, des labours. Certains secteurs gardent une structure quasi-semblable à celle du début du XIX<sup>e</sup> siècle, tandis qu'une partie du Houtland verra sa parure d'arbres à peu près complètement démantelée, fait majeur de l'évolution, les prairies ayant été plus respectées.

#### CONTINUITÉ ET RETOUCHES MODESTES DES ÉLÉMENTS AGRAIRES

Une constatation s'impose pour l'ensemble de la Flandre. La continuité s'observe dans les grandes lignes structurales. Le réseau routier, charpente de l'organisation des masses culturales et du parcellaire, conserve sa forme et sa densité. Aucun remaniement notable n'a bouleversé le dessin ancien. Le remembrement en cours n'affecte pas les grandes lignes du paysage. En outre, il est quasi-certain que par le passé, le Houtland n'a pas "connu des séries complexes" (X. de Planhol 1961) d'organisations agraires comme certains pays de la frange atlantique, telle la Suède.

La trame parcellaire subsiste en maints endroits. Une correspondance parfaite se remarque parfois entre les parcelles culturales actuelles de communes

non remembrées et les champs décrits dans les terriers du XVIII<sup>e</sup> siècle. Le réseau des quartiers de parcelles, les chemins gardent généralement leur allure d'il y a deux siècles. En outre, trois secteurs du Houtland ont peu évolué: finages du centre-Est, du Mt Cassel au Mt des Cats, groupes marginaux orientaux et occidentaux. Des nuances peuvent être apportées à cette affirmation. En effet, si le centre-Est a connu une continuité quasi-absolue pour la superficie de ses masses culturales, par contre, les confins occidentaux et orientaux révèlent une continuité dans le type d'organisation des éléments agraires, mais ceux-ci se sont légèrement rétractés.

*Continuité quasi-absolue.* Quelques communes situées entre le Mt Cassel et le Mt des Cats se caractérisent par une quasi-stabilité. Ces finages révèlent en 1800 une extension des masses culturales très semblables à celle d'aujourd'hui. Comment expliquer ce fait ainsi que le peu d'extension des bois? Des conditions naturelles ont pu favoriser la continuité de l'occupation du sol et donc un recul précoce de la forêt. Des terres moins humides, la proximité des collines, l'éloignement d'un rivage inhospitalier, longtemps incertain à cause des transgressions marines, pourraient contribuer à expliquer l'ancienneté du peuplement. Les sites d'habitat se seraient maintenus malgré les vicissitudes historiques. Le passage d'une route importante, une voie romaine, aurait favorisé la mise en culture précoce et totale des finages. Plus tard, le chemin empierré ou *steenstraete* facilitant l'échange des produits, aurait eu comme conséquence la formation d'un paysage relativement ouvert dès le début du XVII<sup>e</sup> siècle. L'élaboration du paysage aurait été progressive et continue, se poursuivant sans interruption de la mise en culture.

*Continuité dans la répartition des masses culturales.* Au Nord-Est, des remaniements mineurs s'observent dans les finages très médiocrement pourvus de parcelles boisées, où les prairies, légèrement rétrécies, gardent la même organisation. Les horizons se sont faiblement ouverts. La lisière septentrionale s'est enrichie de labours au détriment des prés. Ailleurs, certaines apophyses de surfaces en herbe ont été supprimées. Les enclaves intérieures ont maintenu leurs droits, elles continuent à rompre la monotonie des champs. Actuellement, au Nord-Est, 72% et souvent plus de 78% des terres sont labourées. Ici, ne s'agirait-il pas d'une élaboration progressive mais tâtonnante du paysage, poursuivie laborieusement au cours des siècles antérieurs au XVII<sup>e</sup>. On ignore pour l'instant, le mode de mutation, l'époque du paroxysme de l'évolution. L'acquisition de l'équilibre entre conditions naturelles et systèmes de culture a probablement interrompu l'évolution.

Un paysage sclérosé s'observe aussi aux confins nord-occidentaux. Certaines communes n'ont connu que des modifications de détail depuis la Révolution de 1789. Les pâtures sont toujours massives, quoique plus ou moins retrécies. La confrontation des finages de cette région permet de déceler les différents stades d'une même courbe évolutive. Des paysages analogues, proches dans l'espace, font songer à des étapes dans leur construction. Les uns sont des types avortés, comparativement à d'autres qui n'ont connu qu'un démantèlement très réduit des prairies. La conformation agraire très ressemblante de communes voisines fait penser à une transformation stoppée à la suite de l'établissement d'un niveau démographique stationnaire, accompagné de facteurs psychologiques, telle la réticence à l'évolution.

Ce dernier type de paysage servira de base à un autre essai d'explication. Serions-nous en présence d'un secteur portant la marque d'une "civilisation agraire" particulière? L'analyse de ces finages du Nord-Ouest, caractérisés essentiellement par l'ordonnance plus régulière des masses culturales, — aux labours est laissée la possibilité de se développer sans contrainte à l'arrière des



prairies —, viendrait à l'appui de la thèse préconisant une mise en culture collective du sol. Les paysans auraient procédé à l'exploitation des terroirs, guidés par un plan choisi d'un commun accord et adapté aux conditions naturelles spéciales et aux besoins locaux. Cette mise en culture serait postérieure à celle du Nord-Est. En outre, l'opposition entre ces paysages et ceux de l'Ouest, laisse entrevoir un mode différent de conquête du sol. En effet, à l'Est, l'éparpillement des masses culturales indiquerait un défrichement non dirigé, effectué par de petites unités familiales indépendantes ou par des individus procédant pour leur propre compte, improvisant selon les besoins, les époques, les lieux. Diverses cellules agricoles, établies d'abord dans les sites privilégiés, auraient grignoté les bois et progressé de manière autonome.

Finages du centre-Est, marges orientales et occidentales aux agencements différents des masses culturales, se distinguent par un changement plus discret des composants du paysage. Mais cet immobilisme relatif n'est pas l'apanage de la totalité de la Flandre.

#### EVOLUTION: UN RECUl NOTABLE DE L'ARBRE

L'arbre a connu une grande importance dans le Houtland où la toponymie est abondamment fournie de termes se rapportant à la végétation arborescente. Une observation parallèle de statistiques donne une idée précise de l'importance du recul des bois. En 1839, 30% des localités ne possédaient que 1% de leur finage en bois. Actuellement, 85% d'entre elles conservent des bosquets dans la même portion de territoire. Le défrichement est indéniable, mais il a été d'importance variable. Déboisements systématiques, essartages isolés et sporadiques différencient plusieurs communes centrales, formant une bande de direction Nord-Sud. De même, au Sud de l'Yser, l'équilibre entre milieu naturel et groupe humain s'est constitué à l'aube de l'ère industrielle. Abandons momentanés, puis reprises des défrichements éclairent la mise en culture de cette portion du Houtland. En outre, la chronologie des déboisements caractérise la phase évolutive propre au XIX<sup>e</sup> siècle.

La cartographie de la chronologie des défrichements met en nette évidence un recul plus précoce dans le Nord de la Flandre. Par contre, la portion méridionale connaît un mouvement de gain des terres cultivées au cours de la seconde moitié du XIX<sup>e</sup> siècle. La frange orientale est davantage affectée sous le Second Empire (1852-1870), alors qu'au Sud-Ouest, le gain des labours se poursuit au-delà de 1870. Mesures restrictives, encouragements au reboisement n'ont pas sauvegardé l'intégrité du patrimoine forestier. Les documents d'archives font état des causes diverses du défrichement (Archives du Nord). Les mesures fiscales ne favorisaient plus les bois comme sous l'Ancien Régime. La recherche d'un intérêt immédiat, l'inefficacité des poursuites des délits forestiers, les besoins industriels et domestiques, l'approvisionnement d'une population plus dense, bref, intérêt privé et utilité publique se sont conjugués pour justifier la mise en labours.

Une nécessité accrue de denrées agricoles est liée à l'augmentation du taux de la population. Dans le Houtland, la majorité des communes a connu le maximum démographique entre 1831 et 1851. Quelques communes l'ont enregistré entre 1881 et 1906. Ces considérations corroborent les remarques faites précédemment au sujet de la chronologie des défrichements: une correspondance se repère entre années du maximum et intensification des essartages. Suppression totale des plaques forestières ici, rétrécissement ailleurs, tels sont les divers degrés constatés dans la dégradation de la végétation arborescente. Les *Binnenweide* ou pâtures-manoirs ont subi également quelques transformations. En général, le bocage des prairies s'est rétracté. Les clôtures se sont éclaircies.



Les arbres montants "tels que chênes, frênes, ormes, bois-blancs, bouleaux, peupliers ou saules têtards" (Dieudonné) ont disparu en grand nombre.

La mise en culture activée au cours du XIX<sup>e</sup> siècle, affirme une volonté d'adaptation à la conjoncture. La société paysanne ne vivait plus en autarcie, elle s'ouvrait aux sollicitations du temps. Pays de polyculture, la Flandre est aussi douée pour l'élevage, actuellement ressource importante de la région. Pourtant cette branche de l'économie agricole n'affecte pas le paysage dans ses masses culturales: les herbages ne s'étendent pas, puisque la culture céréalière subvient en partie à l'alimentation des porcs et des volailles.

Par contre, l'habitat agricole connaît des transformations par la multiplication des annexes destinées à l'élevage. Toutefois ce phénomène est récent, postérieur à la seconde guerre mondiale. Une autre modification de l'habitat rural se manifeste depuis le début du XIX<sup>e</sup> siècle. A cette époque, le pays fourmillait encore de maisons. Chaumières et fermes piquetaient les prairies qui exerçaient une attirance marquée sur la demeure de l'homme. Les habitations ne s'égrenaient jamais le long des chemins dépourvus d'herbages. L'abondance accompagnée de l'éparpillement des maisons, s'explique par les conditions démographiques et le type d'économie. Beaucoup de communes ont connu le maximum de population avant 1836. La population s'adonnait essentiellement aux activités agricoles. Élément souvent plus résistant du complexe rural, la trame de l'habitat survit longtemps, et pourtant des chaumières commençaient à disparaître. Cartes et Cahiers de Doléances le prouvent. "Plusieurs fermiers s'émancipent d'occuper deux, trois et quelquefois quatre fermes" (A. de Saint-Léger, Ph. Sagnac), concentration qui s'accompagnait de l'abandon et de la ruine de certains bâtiments jugés trop nombreux. La diminution de l'habitat rural dispersé s'est accompagné ultérieurement d'un mouvement inverse, concrétisé par le développement du chef-lieu communal et l'établissement, au bord des routes, de maisons non accompagnées d'enclos, habitations à fonction non-agricole.

Les conditions de vie, les mutations agricoles expliquent l'évolution de l'habitat. "Derrière la diversité des paysages ruraux... on commence à pressentir le rôle important joué par ... les conditions sociales et économiques..." (E. Juillard et al. 1957). Cette remarque s'applique autant aux pays de la région du Nord, qu'aux sous-régions de Flandre entrevues au cours de cette étude.

L'analyse des aspects de l'évolution de l'habitat et plus spécialement des masses culturales, autorise quelques hypothèses pour les époques anciennes.

La régression des bois dans les communes qui en étaient riches au début du XIX<sup>e</sup> siècle, la disposition des masses de cultures donnent une certaine idée sur les paysages antérieurs. Le réseau routier nous met sur une piste de recherche et soulève des problèmes de datation. La plupart du temps, un examen rapide révèle un type dominant. A première vue, prévaut un réseau rayonnant vers le village. Pourtant des chemins de direction SE-NO apparaissent en filigrane. S'agirait-il d'un quadrillage oblitéré? Aurait-on procédé à une occupation du sol selon un mode particulier, soucieux de partage équitable entraînant le tracé d'un maillage régulier? Les abords de certaines *steenstraete* présentent une superposition de canevas routiers.

La difficulté réside dans la datation des couches successives. Il semble plus opportun de croire qu'une mise en culture antérieure à l'occupation romaine n'a laissé aucune trace en certains secteurs. La cadastration aura remanié entièrement l'esquisse de parcellaire, à moins que celui-ci n'ait jamais existé. Des indices révélateurs de traces de centuriation ne font pas défaut: routes se greffant orthogonalement sur la voie empierrée, coudes et tronçons de chemins, habitations ou sites d'habitats disparus, limites de parcelles, fossés, haies ou

angles de prairies. L'organisation culturelle sous formes de centurries, d'abord respectée, fut sans doute négligée et abandonnée à la suite des vicissitudes politiques et sociales, conséquences d'un période de troubles accompagnant les invasions. Mais il est également possible d'envisager la poursuite de la culture à l'intérieur de ce cadre, en certains secteurs privilégiés, et ceci jusqu'à l'arrivée de nouvelles vagues d'envahisseurs s'accaparant de terres vacantes.

Les Germains auraient mis main-basse sur les terres vierges ou abandonnées. Une reprise du travail de la terre après pacification aurait gravé sur le sol un système de relations différent, sans entraîner disparition totale du premier dessin, au cas où les indigènes auraient poursuivi l'exploitation agricole, guidés par le canevas romain. La superposition de réseaux routiers, accompagnés de parcellaires différents, s'expliquerait par une succession de modes d'appropriation du sol.

L'observation du réseau routier suggère aussi une mise en culture échelonnée dans le temps. L'organisation stellée, voisine d'une disposition quadrangulaire, est un indice à ne pas rejeter. Il contribuera sans doute à éclairer le mode de mise en culture. Sans que soient entrevus tous les aspects de la question, il n'est pas téméraire d'affirmer que la portion de finage à disposition longitudinale a été mise en culture plus récemment.

L'examen de l'évolution des masses de cultures au cours de ces deux derniers siècles permet quelques suggestions quant au processus de prise de possession des terres. Les conditions naturelles ont été peu invoquées comme facteur explicatif. Pourtant leur rôle n'est pas à éliminer, car le Houtland n'a pas nécessairement connu une parfaite uniformité dans son paysage naturel. Landes, bois et marécages couvraient le pays. Les uns et les autres, étaient à des degrés divers, denses ou étendus. Sans présenter d'oppositions tranchées, la Flandre pouvait offrir quelques variétés dépendantes des conditions naturelles. Des clairières devaient faire suite à des bois plus ou moins épais, ceux-ci jouxtaient des marais. Chacun de ces paysages primitifs a pu connaître une courbe évolutive spécifique, en dépendance directe de l'aspect initial. Des exemples appuient cette théorie. L'absence quasi-totale de bois dans le secteur nord-oriental, de l'Yser à la Basse-Colme, une abondance plus grande d'arbres aux abords des collines, au début du XIX<sup>e</sup> siècle, pourraient s'expliquer par une inégalité de la densité du revêtement forestier. Initialement différente, chacune de ces sous-régions aurait connu un mode d'évolution particulier et gardé quelques traces de ce qui les distinguait au point de départ.

Ces quelques jalons quant à la genèse de ces paysages bocagers de prairies, insérés dans la frange atlantique européenne, n'ont pas l'ambition d'apporter une réponse définitive. Seules les hypothèses sont permises pour les époques anciennes. Discerner les phases de l'évolution, esquisser le processus de l'occupation du sol seront une tâche d'autant plus délicate que les siècles antérieurs au XVIII<sup>e</sup>, sont dépourvus de documents cartographiques.

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THE ORIGINS OF THE TWO- AND THREE-FIELD SYSTEM  
IN ENGLAND:  
PAST CONJECTURES AND FUTURE RESEARCH\*

HAROLD S. A. FOX

The two- and three-field system dominated and regulated the lives of many English communities for a period spanning, at the least, seven hundred years. It was crucial to the levels of subsistence of individual families. Equally, because so much of central England came under its sway, it cannot be discounted as an influence on the economic performance of the country at large. At one time itself a highly significant innovation, the system subsequently came to constrain the innovations of a later age. Its rhythm and institutions imposed heavily upon the lives of those who were caught up in it and, along with other phenomena which tended to coincide with it (such as strong manorial control and the practice of impartible inheritance), gave a sociological distinctiveness to communities where it prevailed. Our understanding of the demography, technical development and sociology of rural England in the past demands a full understanding of the system in all its contexts, no less of its functioning and ultimate decline than of its origins which are the subject of the following discussion.

DEFINITION

The two- and three-field system was an 'open field' system in the sense that the parcels of land comprising most of a farm holding within the system had open, unfenced boundaries. These unfenced parcels were grouped into bundles called *culturae* in the Latin terminology of medieval documents and, in the vernacular, described by a variety of terms of which 'furlong' was the most common and is that used by most historians today. The furlongs themselves were grouped into two or three hedged tracts of land almost in-

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\* This paper was originally prepared to form the basis for discussion, at the Warsaw meeting of the Permanent European Conference for the Study of the Rural Landscape, of the genesis of the two- and three-field system in England and continental Europe. Its preparation coincided with the beginnings of research by the author into the two- and three-field system on the western borders of the Midlands. That research, suspended at Cambridge in the summer of 1975, will be resumed late in 1977 at Leicester. The paper was lightly revised for the press early in 1976 in Belfast. For a variety of reasons, therefore, footnotes have been kept to a minimum. References are given only to those works cited in the text; references to manuscript and printed sources will be given in amended and enlarged versions of the paper, to appear later.

variably called *campi* or 'fields' in the documents. The fields, whether two or three, of each community were of approximately equal size and the parcels of a normal farm holding were distributed approximately equally between them. Each year one of the two or three fields was set aside as common fallow grazing for the animals of those farmers who cultivated parcels within the system. Regulation of grazing in this fallow field, and of aspects of cultivation in the other field or fields, was achieved by communal decisions made at meetings of those concerned.

It should at once be clear from this simple description that only two features of the two- and three-field system were unique to it. Bundles of unfenced parcels similar to the furlongs of the two- and three-field system were to be found in almost all types of 'open field' arrangement; most types involved common grazing (though not necessarily by the animals of all cultivators in the system) of those patches of land which lay fallow. Some degree of regulation of some aspects of husbandry was a feature of nearly every type of field system. But unique to the two- and three-field system was a grouping of the furlongs into two or three fields of roughly equal size. Unique too was the allocation each year of a compact block of land, one of the fields as common grazing for the animals of all cultivators.

It should also be clear that these two unique features of the system were closely related to one another: the latter, a functional aspect of the system, found its expression, in terms of field layout and landscape, in the former. For it is difficult to envisage how a third or a half a community's arable could have been efficiently and effectively grazed in common by the flocks and herds of all cultivators without a division of the land into two or three compact fields and a division of the land of farm holdings equally among them. Conversely, it is difficult to envisage what motive lay behind a division of a community's arable into two or three fields (and the equal distribution of the strips of holdings between them) if it were not the desire to set aside each year a new compact half or third of the land (and a half or third of each holding) for fallow grazing. It cannot be argued that a three-course rotation necessitates three compact fields, for the familiar three-course rotation of early medieval Europe was a considerably earlier innovation there than the three-field system. Moreover, as we might expect, there are numerous examples from medieval England of departures, within a three-field system, from traditional three-course rotations, as well as examples of field systems in which furlongs were assigned for rotation purposes to one of three 'seasons' but in which these seasons did not find expression on the land in three great compact fields. The requirements of fallow grazing, not the requirements of a particular sequence of cropping, were what lay behind the division of the land into two or three fields.

To have isolated in this way only two basic characteristics of the system has important implications for our search after its origins. For it so happens that the earliest documents to have survived in reasonable numbers and which contain some detail on field systems are those twelfth-century charters which give information about the manner in which the parcels of a holding were distributed within the arable territory of a settlement, but which tell us very little else. Once it is allowed that an equal distribution of the parcels of holdings between two or three fields is unique to the two- and three-field system, and implies biennial or triennial fallowing of whole fields, then our search among early documents for the presence or absence of the system becomes far easier. Luckily, a unique and diagnostic feature of the system is also a feature about which our earliest detailed documents are not silent.



## SOME CONJECTURES ON ORIGINS

H. L. Gray, in a pioneer work of great originality published in 1915, was the first to scrutinize in detail the documentary evidence relating to English field systems. Lacking detailed evidence on the field system of Saxon England, he assumed that 'distinctions which obtained in the thirteenth century are assignable to the period that saw the accomplishment of Saxon settlement'. He also assumed that, in their homeland, the invaders already practised a two- or three-field system. Relatively late documentary evidence appeared to show him that the area characterized by the two- and three-field system broadly coincided with the area where Anglo-Saxon settlement had been strongest, and he therefore concluded that its introduction there was further proof of 'a thorough Germanization of central England' in the fifth and sixth centuries (H. L. Gray, 1915). Gray's assumptions — that the two- and three-field system was an early and an Anglo-Saxon system — were also his conclusions.

A generation after the publication of H. L. Gray's work, C. S. and C. S. Orwin provided what was essentially an elaboration of his views. In contrast to the Harvard scholar, the Orwins were intent on applying the historical imagination, based upon their deep acquaintance with the land and its cultivation, to the question of how pioneer settlers in the past might have grappled with problems of survival. Their model — which they described as a 'diagram rather than a picture of that which must have happened' — is, in the absence of documentary evidence about pioneer Saxon farming, as conjectural as Gray's. But it is based less upon assumptions about continuity and about the migration of material culture, more upon suppositions about the perception and responses of farmers under pioneer conditions. It portrays groups of pioneers of necessity clearing and cultivating their newly-acquired land as a community and, as a result, dividing it among themselves into strips and managing it according to common rules. Believing that a biennial rotation, with a fallow every second year, was commonsense practice for any settled group of farmers, the Orwins supposed that these strips would have been cast from the first into two fields. At a later stage these two fields might be made into three. A product of communal clearing and subject to communal cultivation, the arable land would naturally have been turned over to common grazing in the fallow year (C. S. and C. S. Orwin, 1938).

The Orwins neatly side-stepped a cultural explanation: their model does not require that Anglo-Saxon immigrants, supposed originators of the system, were acquainted with it before their departure from the continental mainland. Rather, the Orwins viewed the system as a functional response to pioneer conditions. Persuasive, eminently practical and down-to-earth, their view became an orthodoxy until its implications were reconsidered by Dr. J. Thirsk in 1964. Thirsk's model may be described as evolutionary rather than cultural or functional, for one of its premises is that we need not assume that all features of a field system have always existed together. It has been suggested above that the diagnostic features of the two- and three-field system were the equal distribution of the parcels of holdings between two or three fields of equal size and the reservation each year of one of these fields as a common pasture. It is not therefore necessary to discuss here Thirsk's challenging views on the origin of the parcels into which the fields were divided. As for the origins of the diagnostic features of the system, her model attributes them not to the time of the Anglo-Saxon invasions but to agrarian reorganization dated roughly to the 150 years between 1100 and 1250. Thirsk

believes that, prior to reorganization, the arable parcels surrounding villages later to be two- or three-field villages lay in 'numerous fields, not apparently arranged in any orderly groups'. The layout of these blocks of land seemed to follow no overall plan; some were termed 'fields', others termed 'furlongs'; 'no distinction was preserved between furlongs and fields'. The parcels of individual holdings were not distributed in any regular way throughout a village's arable territory. Cultivators may have pastured their animals on their own parcels by tethering them and groups of neighbours may have come together to make arrangements for the common pasturing of single small fields or furlongs; but the great compact fallow field was absent in concept and practice. Such systems, according to the new model, were reorganized in response to the stimulus of growing pressure of people on the land, reflected in their need to maintain sufficient numbers of animals for traction and for manure. Because of diminishing supplies of wasteland and pasture, a result of extension of cultivation, it was necessary that fallows should be used as efficiently as possible for grazing and, in particular, that all animals of all cultivators should have access to all the fallow available in any one year. This could best be achieved if a compact block of arable land were set aside each year as a fallow field, a procedure which, in the interests of the viability of individual holdings, required a redistribution of strips (J. Thirsk, 1964).

Thirsk's presentation is referred to here as a model simply because it is far more impressive as a logical argument, supported by comparative evidence, about how the two- and three-field system might have originated in central England than as an account, supported by evidence *in situ* so to speak, of what did happen there. It has by no means become a new orthodoxy; of the two major evaluations of the model — those by A. R. H. Baker and R. A. Butlin and by J. Z. Titow — one lends it cautious support, the other provides severe criticism.

The assessment of Baker and Butlin rests for the most part, like the model itself, on evidence relating to places and periods away from and later than central England in the twelfth century and the first half of the thirteenth. Clear, incontrovertible and relatively abundant post-medieval examples of acts of remodelling of 'open field' systems in Northumberland and Yorkshire, together with some evidence from the thirteenth and fourteenth centuries, led them to conclude that it seems 'both theoretically possible and — in some instances — practically proven that field systems have been remodelled at varying dates in different villages between the eleventh and eighteenth centuries'. Further equally clear post-medieval evidence — from Northumberland and parts of Scotland, for example — indicates that remodelling could lead to regular distributions of the parcels of holdings within a field system. Baker and Butlin convincingly demonstrate that field systems were eminently flexible after 1300 and argue that 'it becomes on *a priori* grounds alone somewhat dubious to postulate their inflexibility before 1300 and since the time of the original settlement'. Thus they provoke those who, like Gray and the Orwins, would date the two- and three-field system to the Anglo-Saxon period. Their major contribution is to demonstrate that the alternative model of Thirsk is theoretically possible (A. R. H. Baker and R. A. Butlin, 1973).

Titow, on the other hand, criticizes Thirsk from a largely empirical standpoint (J. Z. Titow, 1965). I do not propose to comment upon all of his arguments. Some (his claim, for example, that comparative evidence is 'clearly irrelevant' to discussion of the origin of field systems) are issues too broad to be taken up here. Others smack of red herrings: thus his correct contention



that there is no widespread evidence of farming in severalty in central England during the early Middle Ages carries little weight simply because no previous writer (in this century at least) has claimed the existence of such evidence. Rather, I shall mention briefly four of Titow's lines of argument, all of them bearing directly upon the chronology of the origin of the two- and three-field system.

First, in most of his arguments, Titow appears in the role of a protagonist of inertia and stability of agrarian arrangements over time. To him, for example, 'most of the regular features (of early field systems) seem to be the ancient ones'; he finds it 'simpler to envisage an original settlement which created the nucleus of the regular elements'. To adopt such a position — slightly less extreme than that of the Orwins, yet apparently supporting their views — is, in effect, almost to negate the study of agricultural history. Between the advent of the Anglo-Saxons and the beginning of Henry II's reign, typical settlements in central England would have experienced times when population was reduced by the crises of subsistence to which pioneer communities are prone as well as by pestilences as severe, if early chroniclers are to be believed, as any of those of the fourteenth century; they would also have experienced phases of population growth of a magnitude sufficient to transform them, in spite of such crises, from small pioneer groups into the populous communities revealed by Domesday Book and later extents. However many elements of what was later to be recognized as a manor were already present in the early Saxon period, communities undoubtedly became more manorialized in subsequent centuries, even though we cannot be certain that their demesnes, once created, remained stable and under the same form of management. As likely as not, a typical settlement in central England would have been fought for and fought over: as Maitland pointed out, 'readers of the English Chronicle will doubt whether there is any village in England that has not been once, or more than once, a deserted village' (F. W. Maitland, 1897). It would seem improbable that field systems remained stable and inert in these times tremulous with demographic, social and political developments.

Second, Titow argues that because, at least as early as 1086, most 'peasant holdings in the relevant parts of the country' are described as virgates, bovates or their equivalents, no far-reaching medieval agrarian reorganization can have taken place after that date. Because evidence relating to these units antedates our earliest descriptions of the fields themselves, this line of argument would be important if only it could be shown that virgates and bovates invariably retained a strictly agrarian significance. What is clear in the minds of most students of the early middle ages is that in counting virgates and bovates we are not necessarily counting peasant holdings. Virgates and bovates were essentially units of assessment. The fact that land on a manor was assessed in tidy terms of so many virgates or bovates does not necessarily imply tidiness of actual peasant holdings and the way in which their land was distributed. Behind the facade of a stable assessment a multitude of changes could take place in the number of actual holdings and in their composition.

Third, Titow complains that Thirsk defines the system 'as it was in the late sixteenth or seventeenth centuries, that is, at the earliest time when documents permit us to see it in its entirety'. His view is echoed by M. M. Postan: 'The common field system could be defined very precisely to apply only to cases in which it happened to be uniform, wholly symmetrical and above all comprehensive ... Historians adhering to the definition would ... be quite justified in concluding that field systems rigorously and symmetrically organized ... were a late medieval or even modern product of a deliberate ad-



ministrative reform' (M. M. Postan, 1972). The implication here is that to define the system so as to insist upon its regular and uniform attributes is to be forced into the position of accepting a relatively late date for its origin. Yet the very essentials of the two- and three-field system — distinguishing it from other system — were its elements of regularity and relative inflexibility; moreover, these elements may first be discerned in detail not in the sixteenth century but in the thirteenth. Thirteenth-century extents reveal numerous demesnes on which the arable was distributed among two or three fields in proportions which deviated minimally from the 'expected' distributions. Thirteenth-century *compoti* containing cropping plans (a class of document which, in view of its direct relevance to the functioning of field systems, has been perversely neglected by students of the subject) reveal rotational arrangements in which one of the two or three fields was set aside each year as fallow. It is now customary, fashionable one might say, to stress how flexible the two- and three-field system was in medieval England, especially from the point of view of the relative proportions of spring and winter crops cultivated on the sown field or fields. In this respect the system certainly was flexible: changes in the popularity of different crops, changes in consumption habits and changes in market conditions all dictated that there should be flexibility in cropping arrangements and that a rigorous division of the sown arable into two halves, one for winter crops and the other for spring crops, was the exception rather than the rule. But those *compoti* which have been examined from manors in central England indicate far less flexibility as far as the fallow field was concerned: whatever changes were rung from time to time on the other field or fields, that field which in any one year lay fallow tended to be inviolate. Finally, large numbers of charters from the thirteenth century confirm the evidence of extents by revealing numerous places where parcels were distributed equally between two or three fields. In sum, documents from the thirteenth century leave us in no doubt that the two- and three-field system, with all its regular elements, was in perfect working order at that time. We cannot therefore deny the possibility of a relatively late date for the origin of the system and, moreover, an origin through the process of remodelling envisaged by Thirsk. When we come to attempt to give a firmer date than this, we must take into account the last of the four arguments of Titow to be considered here.

Titow dismisses Thirsk's claim that the two- and three-field system originated in central England between about 1100 and about 1250 by supplementing her few references from this period with ample additional evidence from twelfth-century sources describing holdings whose parcels were equally distributed between two or three fields. There is enough evidence in the sources which he cites, and in many other charters from this period, for us to agree with his important and absolutely correct conclusion that equal distribution of strips between two or three fields cannot have been a novel arrangement in the twelfth century. The twelfth century is without those detailed extents and *compoti* which tell us so much about the system in the thirteenth. Yet once it is agreed that equal distribution of strips between two or three fields may, as argued above, be taken as evidence of the operation of a two- or three-field system, this thinning of the documentation is not too great a problem. The two- and three-field system was certainly, a familiar feature of central England in the twelfth century and cannot have originated as Thirsk claims, in the years after 1100. Had it done so, not only would we expect to find less evidence of it in twelfth-century charters relat-

ing to central England, but we would also expect to find there at least some evidence of the process which brought it into being.

Acceptance of this fact has very great consequences for the problems with which this paper is concerned. It means, in effect, that we shall never be able to prove or disprove with documentary evidence any theory about the date and processes of origin of the two- and three-field system in the heart of central England. As we move back in time beyond the twelfth century, even the evidence of charters becomes more and more meagre; the charters of the Anglo-Saxon period, altogether different from those of the Middle Ages, are too few and contain too little evidence to be able to give much assistance to the student of field systems. As happens so often when the retrogressive method of enquiry is used, the thinning of the documentary record as one proceeds backwards through time means that the ultimate 'answer' to a problem is no more than a question mark. The logical extension of retrogressive enquiry through a series of documents is the adoption of archaeological methods; and as far as the heart of central England is concerned, such methods alone can provide an answer to the problem of the origin of the two- and three-field system. Over a decade ago. D. M. Wilson advocated 'the thorough and complete examination of a unified area, a parish for example' in order to 'produce for analysis... an excavated Anglo-Saxon village and its field-system' (D. M. Wilson, 1962); but his exciting suggestion has not been followed up. One scholar surveying the small contribution which has been made by archaeologists in this country to the study of Anglo-Saxon field systems has stated that whether or not they will have 'the time or the resources' to make much further progress is 'debatable' (C. C. Taylor, 1974). This attitude is too cautious: certainly, excavations of field systems are time-consuming and difficult, but the obvious response to such problems should be to direct every effort towards sites which are most likely to yield results. Cultivation, more than most other uses of the land, tends to obliterate: as field systems evolve they partially or wholly destroy their own past. But there were settlements, some of them within the area later characterized by the two- and three-field system, whose fields fell out of use for cultivation at dates early enough for their excavation to be potentially fruitful and exciting. The best known are those settlements which were casualties of afforestation in the late eleventh century; but there are others whose desertion dates from the late Saxon period. There can be little doubt that if a deserted village's arable had been divided into two or three prior to the date of its desertion, this fact could be made plain by excavation.

## TWO RESEARCH DESIGNS

Excavation is the only answer to the problem of the origin of the two- and three-field system in the heart of central England, but on the borders of the area characterized by the system, research using documentary materials may yet give us a partial solution. Two research designs are suggested here, both concentrated on the western extremities of the area over which the system held sway. Both, too, are couched in terms of, and may be regarded as extensions and tests of, the ideas on processes of development (though not on chronology of development) proposed by Thirsk.

The first research design takes us away from the heart of central England beyond the western boundary of two- and three-field country, to West Somerset and East Devon, to parts of Gloucestershire, to mid-Shropshire and Herefordshire and to southern Cheshire and mid-Derbyshire. In the twelfth and thir-



teenth centuries, when evidence on the fields of these borderland areas first becomes available, their field systems were all broadly similar. Their nucleated settlements were surrounded by tracts of 'open field' arable as extensive as those belonging to villages in the Midlands proper. Yet documents which locate in detail the scattered parcels of demesne or peasant holdings in these areas appear strange and unfamiliar to students used to dealing with analogous evidence from the Midlands. Extents have no sub-headings giving the names of fields and charters lack 'field' designations; rather, they contain long and often bewildering lists of units, some with '-furlong' names, some with '-field' names, some termed furlongs, others termed fields and yet others with no particular designation. It appears that, in the western borderlands, we are looking at an 'irregular' field system in which the arable parcels of each settlement lay in numerous small units which were not grouped into two or three large sectors or fields.

The similarity between this type of field system and the immediate prototype of the two- and three-field system described in Thirsk's model is too striking to need much comment. The question which immediately suggests itself is: why did these irregular field systems on the western borders of the Midlands fail to proceed, through remodelling, to become two- and three-field systems? If Thirsk's model is valid, the answer should be that the stimulus for reorganization, namely shortage of pasture, was absent in these western areas.

Some of the most explicit evidence of relative shortage or abundance of pasture in the thirteenth century comes from *compoti* which give details of the use of demesne pastures by lords and their leasing to tenants, and from court rolls which tell of arrangements and disputes touching the pastures used by tenants. Such documents will tell much of possible contrasts in availability of pasture between the Midlands and the western borderlands. Manorial extents from the thirteenth century also contain useful information on this subject, both of a miscellaneous and varied type as well as of a numerical type in the form of land values. Those thirteenth-century extents so far examined for manors in the western borderland areas characterized by irregular field systems reveal little evidence of a shortage of pasture. Most demesnes here contained several pasture; rough pasture on common wastes was an appurtenance of many manors. Extents from adjacent areas to the East where the two- and three-field system prevailed reveal that some demesnes contained small acreages of several pasture; rough pasture was scarce, and occasionally we are specifically told that 'the manor has no pasture'. Equally telling of the contrast in availability of pasture between the edge of two- and three-field country and areas of irregular field systems to the West of it is the evidence of values. The value of pasture varied, of course, according to its type and quality, but if we take only one type — several pasture — we may assume that variations in value reflected relative abundance or scarcity. Research about to be resumed is aimed at producing a detailed picture of variations in the value of pasture in the western borderlands in the thirteenth century. Preliminary results suggest that there was a fairly good correlation between high values for pasture in two- and three-field country and low values in areas of irregular field systems to the West. When completed, this research will have put to the test a corollary of Thirsk's model — namely that irregular field systems did not proceed through reorganization to become two- and three-field systems where the stimulus to reorganization was absent. Preliminary results encourage one to believe that this was indeed the case. Implications for the heart of central England will no doubt be debated, but at



the very least these findings will show how far it is possible to claim that the irregular field systems of those parts of the West which were settled latest owed their character to lack of pressures which, in early colonized areas, may have led to the emergence of a two- and three-field system.

This last supposition leads to a second research design, one which is aimed at possible discovery of documentary evidence of the transformation through remodelling from irregular field systems to the two- and three-field system. It has been stressed earlier that if such transformations occurred in the heart of central England, they would have taken place before the twelfth century and are therefore beyond the reach of documentary research. But might it be possible, on the basis of what is known about the chronology of the Anglo-Saxon settlement, to postdict the approximate locations of those areas where the two- and three-field system may have emerged latest; and, if so, is it possible that in those areas the process occurred late enough to fall within the period when adequate documentary evidence on the evolution of field systems is available? If we assume — and it may be a large assumption — that those who begin a race late finish last, then one obvious area for investigations along these lines would be the boundary zone between regions in western England characterized by irregular field systems of the type described above and two- and three-field country proper. There can be no doubt that western areas lagged several centuries behind some other parts of England in terms of their primary Saxon colonization; in all probability shortage of pasture would have been felt later there than, say, in the heart of the Midlands. With the type of development outlined by Thirsk in our minds, let us try to envisage the boundary zone as it may have been when the process of remodelling of field systems was still in progress. To its East, most villages had already adopted the two- and three-field system. Thereafter, reorganization began to affect selected villages within the border zone itself, leaving the pattern which existed in the later Middle Ages of settlements with irregular field systems scattered among other settlements practising the two- or three-field system. Whether only those villages at which the necessary stimulus was present in its most acute form adopted the system; whether some villages followed the example of their neighbours and remodelled their irregular field systems before such a course became absolutely necessary; whether settlements which may still have been in the process of being created at this time at once took up the system without going through earlier stages: these must all, for the present, remain questions for speculation. Answers will have much to do with the precise nature of the process of adoption of the two- and three-field system; with, for example, the character of the adopters (whether they were lords whose scattered manors may have given them experience of different types of system or peasants with more limited horizons) and with the width of the range of options which separated response from stimulus. Whatever the precise nature of the diffusion of the two- and three-field system into this boundary zone may have been, it is possible that the process was taking place at a time for which charter evidence, perhaps even the evidence of extents and *compoti*, is available. There, in the stretch of country between the Midlands and the West, if anywhere, evidence of remodelling and of the evolution of regular two- and three-field systems may yet come to light.

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## RECENT EVOLUTION OF SOCIAL AND SPATIAL STRUCTURE OF AGRICULTURE IN THE NORTHERN FRINGE OF FRANKFURT AM MAIN

BODO FREUND

What are the general traits characterizing urban agriculture? Do essential differences occur between agricultural units which have been changed to isolated farmsteads on consolidated holdings and those that have remained in their villages? How is their future distribution expected to develop? With these problems in mind the author carried out standardized interviews with all farmers at seven localities in the northern fringe of Frankfurt am Main.<sup>1</sup>

As to natural and structural conditions, the area under investigation is slightly better than the average of Frankfurt's environs. The area under cultivation, insignificantly inclined and consisting of loess soils, is situated at 110 to 180 m a.s.l. Annual precipitation varies around 600 mm, the mean annual temperature is about 8.7°C.

### THE SOCIAL STRUCTURE OF THE FARM OWNERS

On the whole, agriculture at the fringe of large cities is exposed to the influence of two important factors: first of all, both the farmers and their children are under the lure of manifold favourable chances of employment; again, farmers settled in ancient villages are cramped in their activities by increasing suburbanization. The result of this joint attraction and pressure is that less prosperous, usually smaller farms are readily abandoned. Moreover, the vigorous increase of population tends to change the local social structure, so that ultimately farmers constitute merely a small minority among a professionally active population (1-2%).

They markedly differ from the population surrounding them: families with relatively numerous children (2, 3), frequent cases of three generations forming an enlarged family (particularly among those who moved into the isolated farmsteads) seem to be outstanding features of pre-industrial social conditions. Most farm owners rose from peasant stock, some 80% were born locally, nearly 60% still have relatives in agriculture living up to 10 km distance.

While for most of the local 'village' population Frankfurt or small towns like Oberursel and Bad Homburg are the everyday centers of activities, the area

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<sup>1</sup> These localities are: Kloppenheim, Petterweil, Nieder-Erlenbach, Kalbach, Steinbach, Stierstadt, Weisskirchen. Since the administrative reform, part of these villages were incorporated into towns like Frankfurt, Oberursel and Karben.



of interaction among farmers is spread over their own and of the nearest neighbouring villages; here it is where they work, here they sell what they produce and purchase what they need; here reside their partners in joint use of rural machinery, as is customary among two-thirds of the farming population.

In spite of the strong competition in the own group (for additional land to enlarge the holdings), farmers hold firmly together in order to defend the interests of their group. In relation to the great building activity of strangers to their village, they have a rather restrained behaviour, because they fear the loss and dissection of agricultural land and also crop damages.

Very little residential mobility, marked stress laid upon close family relations within a minor yet firmly settled population group, and intimate interaction between group members combined with a latent reluctance to exterior impulses—all these are indices of a clearly defined sub-culture.

The pure family farm is the rule. In only 4 of the 119 analysed farms, workers from outside predominate while in 5 cases an equal amount of work is being done by family members and hired labour.

Some 75% of all farmers devote all their time to agriculture; the remainder gain additional or principal income from other employment. Among these 25%, most are independants (handicraft, business) and employees in services, while only one among four of them happens to be a worker. This shows that the local agrarian structure is in no way stamped by part-time farmers and even less by what is called 'worker-peasants'. Many of the farmers with additional earnings perform activities connected with agriculture or constituting part of traditional local handicraft.

Although most probably a good number of the interviewed farmers have not revealed all their additional incomes, it is quite sure that earned secondary income is much less important than unearned income which is usually gained from letting buildings or part of them. Thirty six of those interviewed lease as habitations some former servant quarters or the houses where they themselves lived once, or they even have specially built apartment houses; moreover, they let garages, workshops, store houses, shops.

It is only possible to gain insight to the basis of subsistence of suburban farmers by tabulating the variety of combinations between agricultural and non-agricultural activities and other sources of income (Table 1). Although agriculture is evidently the principal activity, only half of the farmers live exclusively from it.

TABLE 1. Combination of forms of income

Number of interviewed	Percentage	Forms of combination
57	48	Farmers with income from agriculture exclusively
27	23	Farmers with income from agriculture and from additional sources (let)
6	5	Farmers with income from agriculture and some additional activity
5	4	Farmers with income from agriculture, other activity and other sources (let)
10	8	Part-time farmers with main activity not in agriculture
12	10	Part-time farmers with additional sources (let)
2	2	Ambiguous cases, probably farmers with income from agriculture exclusively
119	100	Total of interviewed farmers

## SPATIAL STRUCTURE OF THE HOLDINGS

For the first years after the war, small farms remained typical for the agrarian structure of the region, especially in the villages of the Taunus foreland. One-third of the farms investigated in 1949 had less than 2 ha cultivated land each. Today this type of farms has practically disappeared; also the number of farm holdings of more than 2 ha under culture have dropped to the half during the recent 25 years. Thus the diminution proved greater here than it was for the average of Hessia, just as can be observed in most areas near cities, and this diminution set in very early.

TABLE 2. Evolution of structure of farm sizes

Year	2-5	5-10	10-15	15-20	20-30	30-50	50-100 ha
1949	42	78	93			17	6
1960	27	37	58	28	18	12	6
1970	14	11	32	21	21	11	4
1974	6	6	23	27	32	18	7

In view of the fact, that in the urban fringe zone the rate at which agricultural land is valued depends upon increasing costs of building sites, only a small percentage of vacated agricultural area can be bought by farmers. This is the reason why the share of leased land in the total area cultivated by farmers has risen from 30% (1949) to 55% in 1974. Usually the larger farms attain their higher position in the size scale due to land they take on lease, because land owned by themselves can hardly be increased. This phenomenon applies particularly to those farm owners who have moved from their villages into the open country — probably because they were more eager than others to take on lease additional land and because they accepted plots in rather great distance from the village (Fig. 1). By lease the scattered structure of the remaining farms has generally increased, even if this aspect is less important than the increase of land at the farmers disposition.

Fragmentation of holdings is extreme in three of the investigated villages where there has been no land consolidation since the turn of the century. Individual endeavours to consolidate are rather hopeless, because speculation in building sites lames any sort of changes by exchange, purchase or other forms of leasing — the more so since large areas of ground are no more owned by farmers. Under normal conditions, however, some form of consolidation has taken place after the last war. In the other villages which have been investigated the post-war consolidation was already the second one.

Nearly in all densely populated regions of the Federal Republic one could realize a strong tendency to re-allocate farmsteads outside the cramped centers of the vigorously expanding settlements as it turned increasingly difficult to operate modern field machinery there or to carry out large-scale animal raising. On the other hand, a trend towards modernizing old farm buildings is more characteristic of areas of the country that are less subject to industrialization (the North and Southeast).

At present, in 1975, among the investigated farms there are 37 (31%) that have moved from village into the countryside; they cultivate 40% of the land. With 32 ha on the average they operate on more land than the farms that did not move, especially when leaving out of consideration the 4 old estates cov-

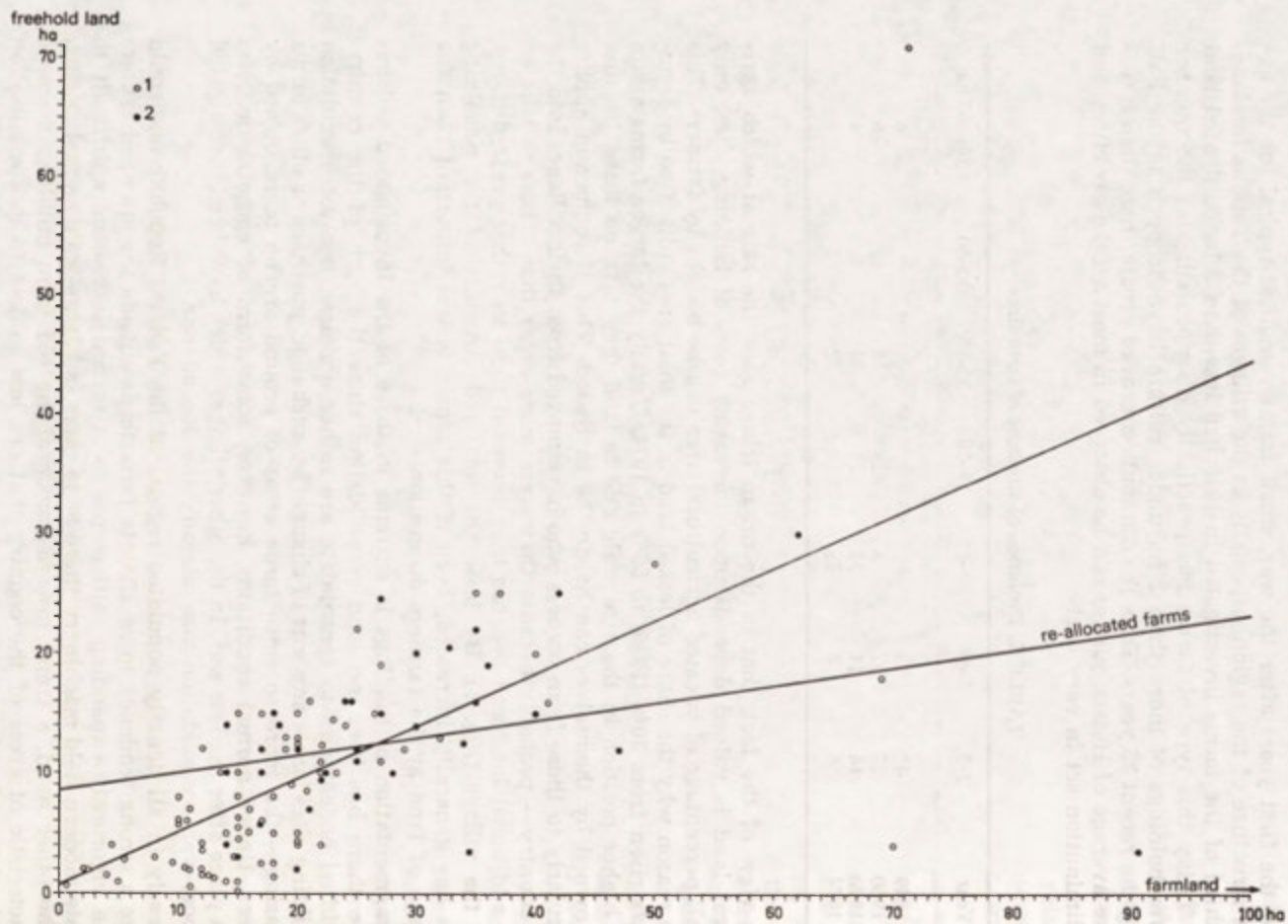


Fig. 1. Freehold land in relation to total farmland

1 — village farms:  $y = 0.756 + 0.435x$ ;  $r = 0.618$

2 — re-allocated farms:  $y = 8.529 + 0.144x$ ;  $r = 0.573$



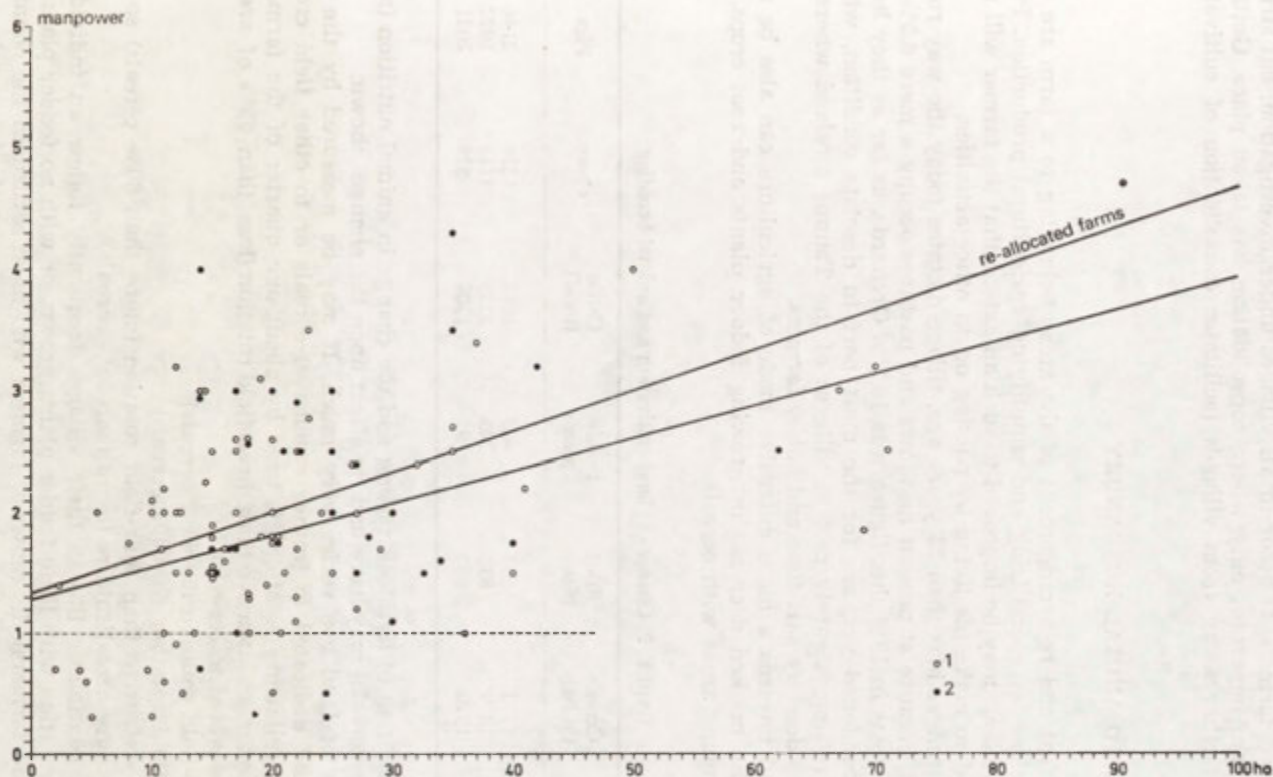


Fig. 2. Labour per hectare

1 — village farms:  $y = 1.2925 + 0.0258x$ ;  $r = 0.474$

2 — re-allocated farms:  $y = 1.3482 + 0.0328x$ ;  $r = 0.421$

ering more than 50 ha land each, as rather being exceptions to the rule (averages: 20 or 17 ha).

Re-allocated farmsteads occur in all villages under investigation, but structurally they are important only where consolidation has taken place. Getting established farther away from villages facilitates consolidation of cultivated plots.

#### LAND USE AND ANIMAL HUSBANDRY

Enlargement and re-arrangement of the areas belonging to a farm are essential premises for specializing and simplifying agricultural production. Productivity of labour may be improved to such an extent that the farmer will not be compelled to make his living by passing on to other activities.

With a stronger bias than 25 years ago, tillage dictates today the way rural land is used, because at present meadows and pastures occupy a mere 6.5% of the land whereas in 1949 this figure was 18.2%. Orchards, as far as they have not been abandoned yet, are for the most part in desolate condition, while strawberry raising is rarely met in villages of the Taunus foreland where it was formerly done by part-time and hobby farmers.

The trend towards a more extensive mode of agriculture can also be observed in the marked decrease in growing fodder plants and root crops, in favour to sowing areas with cereals.

TABLE 3. Changes in land cultivation and animal breeding

Year	Cereals (in ha)	Root plants	Fodder plants	Cattle (total)	Cows	Pigs
1949	1277	932	409	1688	1216	2146
1960	1479	832	243	2255	1111	1922
1974	1770	607	95	1307	539	2021

The diminution of livestock raising and the change in animal nutrition (new fattening by cereals) may have had its effect upon the changes shown.

Intensity of land use varies very much. It may be measured by the relation of land dedicated to (rather extensive) cereals or to other field crops. Each of the following rotations is used by about one quarter of the farmers:

- rotation more intensive than three-field rotation (less than 63% of arable land devoted to cereals)
- three-field rotation (63-69% cereals)
- four-field rotation (70-80% cereals)
- more extensive than four-field rotation (more than 80% cereals) sometimes pure cerealculture (more than 95% cereals)

Farmers continuing life in their villages frequently follow an individual three-field rotation with little fodder plants grown, or with no fodder plants at all (part-time farmers). In contrast, farmers who have settled in the countryside, show a greater variety in crops and, due to raising cattle, frequently grow fairly much fodder (more than 15%; cf. Fig. 3).

The decreased diversity in cultivation is expressed by the fact that only cereals and sugar beets are being grown in more than 60% of all farms (cf. Table 4). The remaining crops occur less often and — excepting maize — tend to decrease. Of course, there also will be farms where particular attention is

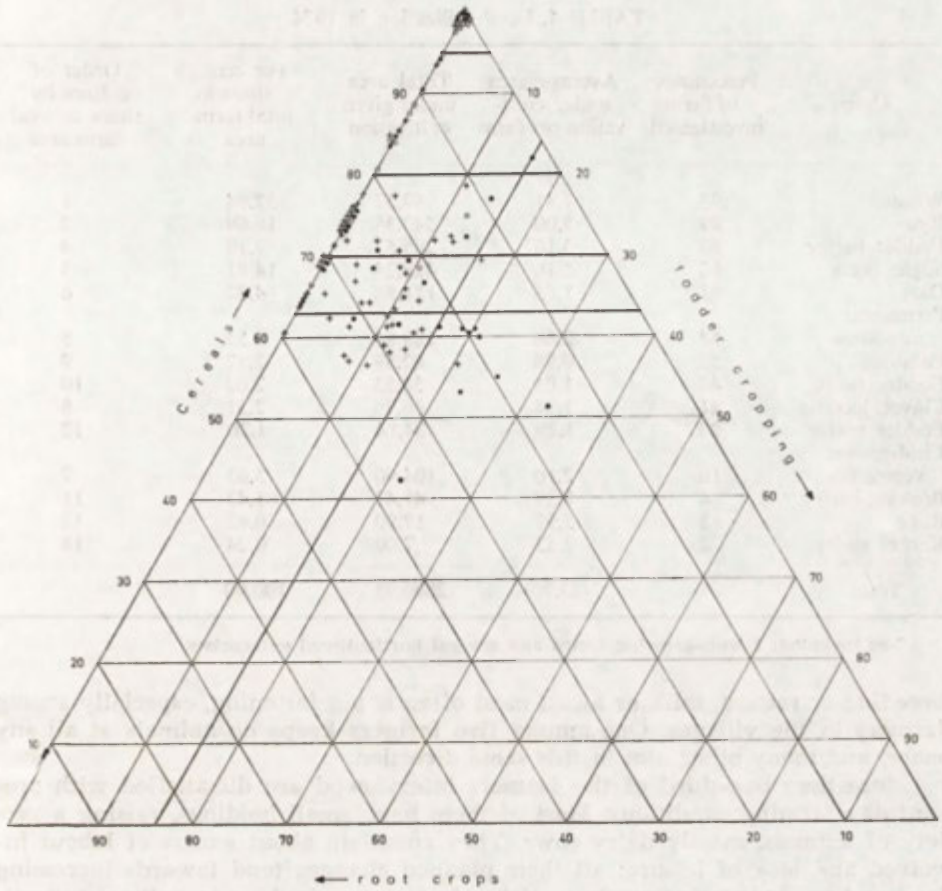


Fig. 3. Structure of main crops by three types of farms (%)

1● — re-allocated farm, 2○ — part-time farms in villages, 3+ — full-time farms in villages

given to raising less common products as specialities, such as field-grown vegetables, brewing barley, rape.

In one half of all farms, fodder plant growing has been fully abandoned, so that either only cereals (especially wheat) and root crops (especially sugar beets) are alternately grown, or cereals only. Most definite is the trend towards extensive and simplified cultivation among part-time farmers.

Similar trends towards rationalization can also be observed in animal husbandry. Table 3 indicates that the tedious keeping of dairy cows — once a typical near-city specialty — has been decreasing for a long time; today only less than half of all farms maintain milk production. The tendency towards completely abandoning this activity is more marked in the villages than among farms reallocated in the open country.

Following a period of a distinct intensification in raising bulls for breeding, this form of animal husbandry is also subsiding. On the other hand, pig raising is maintained constant, as in a decreasing number of farms the number of animals per unit is increasing. By now one farm among four is concentrating its efforts upon keeping only one type of animals for a single destination, as



TABLE 4. Land utilization in 1974

Crops	Percentage of farms investigated	Average area under cultivation per farm	Total area under given cultivation	Per cent share in total farm area	Order of culture by share in total farm area
Wheat	95	7.81	952.32	32.94	1
Rye	89	5.00	540.35	18.69	2
Fodder barley	69	3.16	265.53	9.19	4
Sugar beets	68	5.16	428.28	14.81	3
Oats	61	1.65	121.88	4.22	6
Permanent meadows	58	2.66	188.84	6.53	5
Potatoes	52	0.98	62.59	2.17	9
Fodder beets	48	1.01	58.33	2.02	10
Clover, lucerne	41	1.34	66.76	2.31	8
Fodder maize	22	1.29	34.84	1.20	12
Field-grown vegetables	16	2.10	104.90	3.63	7
Brewing barley	4	8.29	41.43	1.43	11
Rape	2	5.97	17.90	0.62	13
Kernel maize	2	2.33	7.00	0.24	14
Total		(23.70)	2890.95	100.00	

Not included: 1 fruit-growing farms and several horticultural enterprises.

breeding or raising, milk or meat; most often is pig fattening, especially among farmers in the villages. One among five farmers keeps no animals at all any more, and many other aim in this same direction.

More than one-third of the farmers interviewed are dissatisfied with present-day farming conditions. Most of them have small holdings, raising a variety of animals, mostly dairy cows. They complain about excess of labour involved and lack of leisure; all their planned changes tend towards increasing land and towards reducing the variety of animals raised, or to quit raising animals, in order to simplify and to diminish inputs of labour. This end is most easy to attain if income from farming can be supplemented by other means, e.g., earning money by letting rooms and houses. At the rate at which the villages are suburbanized, it can be assumed that agriculture near the urban fringe is going to grow into a more extensive operation.

#### FORMS OF MARKETING

All production is clearly intended for marketing. Private consumption of part of what the farm produces is only of secondary effect and this most often applies to pork (in 70% of all farmsteads), potatoes (52%), eggs and milk in less than 50%.

The forms of marketing are rather diversified. This fact must be ascribed less to lack of organization than to the many alternatives tempting in a zone containing a dense population. Obviously, some part of rural produce never reaches the open market. For instance, only one of five farmers sells part of his fodder barley and oats. At least one half among the potato growers turn over their surplus to nearby final consumers or to small dealers in their vicinity, and among these buyers the Frankfurt population plays a minor role. Much the same is observed in the sale of eggs of which two farmsteads made their specialty, one keeping 8500 and the other 1000 hens.

Vegetable growing is concentrated in one village (Nieder-Erlenbach) where 15 among 21 farmers work at this production; but buying is done by at least 10 different recipients, mostly traders with their own stands in Frankfurt's wholesale market hall, or plants manufacturing canned food. Vegetable production at the above village is determined by historical and organizational factors and cannot be ascribed to the allurements of a nearby market.

Animals for slaughter are mainly sold to local or regional butchers. This form of marketing is preferred by half of the pig producers and by one third of the cattle producers. The remaining farmers sell equally to livestock dealers or a processing co-operative at the Frankfurt slaughter-house. This organization is evidently preferred by the more important pig fatteners (having an average of 85 animals) and farmers of the outskirts.

Cereals are sold quite irregularly to co-operatives, dealers, mills or agricultural credit-institutes just according to personal habit, actual price or contract. This seems strange because milling industry is rather concentrated economically.

Maximal concentration of outlet affects sugar beet and milk, as there are delimited catchment areas for the plants existing in Frankfurt (milk), Friedberg and Gross-Gerau; local farmers have collective contracts with these enterprises.

The different ways of sale demonstrate that relations between agricultural production and town have fundamentally changed compared to former times. If commodities are sent to town then it is principally for handling and packing them there and for distribution from this point to a larger area. The most important producing areas for raw materials in question (cereals, meat; vegetables, milk) are not or no more localized in the environs of the town.

In those cases where an important part of the sales is made directly between the farmer and consumers or retailers (potatoes, eggs; animals), the market is not localized in the city but in the suburbanized environs.

#### CHARACTERISTICS AND DEVELOPMENT OF THE TWO LOCATION TYPES OF FARMS

The development of the locational structure of farmsteads is essentially dependent on individual decisions and on the ability of the farmers to carry their decisions into effect. In this respect the recent 20 years seem to represent a crucial phase which had its bearing upon the continuance of particular farms and upon the place where they are situated. In the villages have remained mostly those farmers whose children have taken up a different occupation or are intending to do so. Some farmers had applied for state subsidies for re-allocation but they were not promoted because they had too little land of their own or the family structure did not offer any security that the farm would be managed by the next generation.

Peasants with re-allocated farmsteads are usually inspired by the resolute determination to rise, as may be seen by their very decision to put up a new farmstead. And after having moved out of the villages, one half of these farmers have been expanding their buildings, their livestock, and their area under cultivation. The efforts to attain social ascent are also discernable in the tendency to secure for their children the best possible education in high school and university.

As to their own economic and social position and to the growth of the village, the re-allocated farmers are less emotional than those who failed to move. Practically all of them consider re-allocation to have been a good de-

cision. They maintain that they would have lacked the chance of improving their property and bettering its organization if they had remained in the crowded village. Less often they refer to better opportunities to enlarge land and to get advantageous public credit, but these may have been essential motivations.

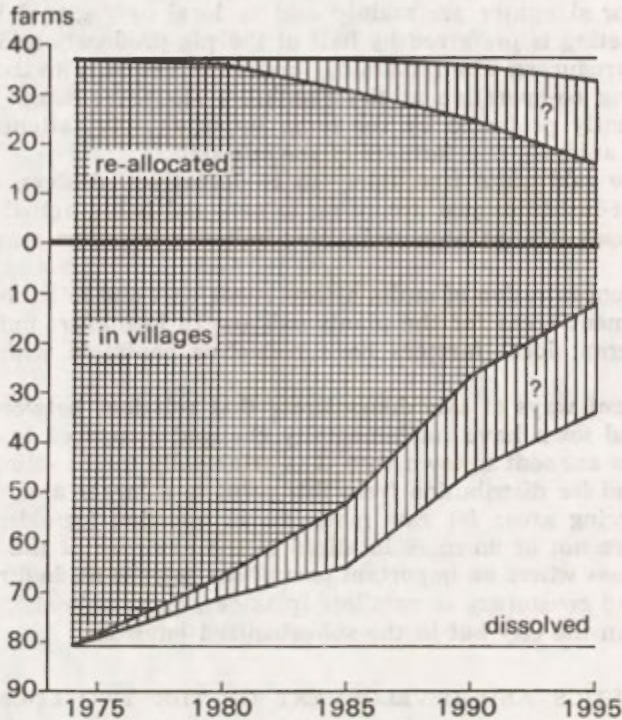


Fig. 4. Probable evolution of farms situated in villages and of re-allocated farms

Among re-allocated farmers a more rational mode of operating can be observed; in spite of a severe competition they are more inclined to co-operate by joint use of machinery, etc., because all of them are very anxious to reduce costs. Their enterprises are normally more specialized: one out of three does not raise livestock any more, while in the original village only one out of six farmers does the same. But if farmers keep animals, then this part of production has more importance among the re-allocated farmers than among those who remain in the village (60 and 40% of income, respectively).

It seems remarkable that re-allocated farmsteads use a higher proportion of their land for growing market produce, and that nevertheless the share of income from livestock raising is higher. This leads to the conclusion, that these farmers care less about producing fodder plants for their animals and manage to gain better financial results by relying upon bought fodder. Hence one might say that they have integrated their economy more effectively into the superposed agribusiness. Some of the differences between re-allocated farms and those which remained in the villages were identified by comparing the results of a series of calculations of regression made separately for the two locational types. Two examples of this procedure are presented in Figs. 1 and



2; in addition, only mentioned are further three examples.<sup>2</sup> Regrettably it turned out that the differences concerning isolated phenomena are rather slight. Moreover, due to partly very low values of the coefficients of correlation, the results of this venture are ambiguous. Yet it seems out of doubt that the co-action of many slight differences does distinctly affect the characteristic of the two locational types.

One-third of all farm owners, asked for their opinion about present-day economic and social conditions, called them favourable; to another third they seem disfavourable. And it is surprising that in this respect there is little difference between what is expressed by farmers in the village and by those in the outskirts. Still, the latter express their opinion more explicitly and, at the same time, in a less drastic fashion.

Notwithstanding a widespread discontent, only very few farm owners would be willing to reduce operation or to abandon farming altogether in the near future. However, it seems possible that among many of the 'village' farmers their hesitancy about changing the site lies in the belief that in the long run they may have to abandon farming.

Close on one-third of the farmers who have stayed in their villages admit that moving into the country would have been the proper step to take. Yet few among them would be willing to risk this change now; it frequently emerged that meanwhile some have put machinery sheds of their own in the fringe zone of their villages or in the open land.

Of the few farmers willing to risk even now a change of location, no one seems to be proper to make a success of it, judging by the size of their holdings and their family structure; and at least some of them regard re-allocation merely as a profitable venture. Hence it might be concluded, that in the area under investigation the period of re-allocation has come to an end due to lack of both adaptability and initiative, and to limited public credit also.

However, while this trend appears to have come to an end, its final effect is by no means spent, because in the continuing process of selection all farmsteads, the villagers as well as those that have moved, are bound to show differences in perseverance. A whole series of premises may serve as means for anticipating further development in this respect, to wit: actual intention of quitting, appraisal of the farms destiny after the present owner has reached age limit, family structure, foreseen decisions about future profession of potential heirs and, finally, conjectures about what are going to be the indispensable minimum sizes for operating farmsteads rentably in future periods of time.

Even applying very favourable limits it turns out evident that the reduction of farm numbers will start earlier and will also be more severe in the long run among those which stay in the villages. In twenty years most of the remaining farms will be re-allocated ones, even if there will be no further re-allocation.

The diverging evolution that is predictable for the two locational types of

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<sup>2</sup> Scattering of farm holdings (lots per ha arable land) and increasing area:  
 village farmers:  $Y_o = 15.704 + 0.167x$ ;  $r = 0.125$ ,  
 re-allocated farmers:  $Y_a = 10.128 - 0.138x$ ;  $r = -0.453$ .

Share of area of market products related to increasing total arable land:

$Y_o = 64.708 + 0.622x$ ;  $r = 0.378$ ,

$Y_a = 74.411 + 0.040x$ ;  $r = 0.115$ .

Share of production gained from animal husbandry and area of arable land:

$Y_o = 30.588 + 0.061x$ ;  $r = 0.003$ ,

$Y_a = 38.949 - 0.041x$ ;  $r = -0.036$ .

farms shows that the decisions about the location were generally rather far-seeing and that thus a long-term selection has begun.

The necessity to upgrade farms even more rapidly, the endeavour to get more leisure and the difficulties to find a wife interested in agriculture may possibly accelerate the process of selection or adaptation. It is imaginable that the idea of the family farm will have to be gradually abandoned for economic, technical and social reasons. This tendency will probably start earlier near cities than in areas of higher portion of agricultural land and population.

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## REGULATED VILLAGES IN MEDIEVAL SCANDINAVIA

SÖLVE GÖRANSSON

Before the splitting up, in connection with the enclosure movement in the 18th and 19th centuries, of nucleated settlements in many parts of Sweden and Denmark, villages with a regular layout were to be found over large areas, in Sweden mainly in the heartland provinces in eastern Svealand—Uppland, Västmanland, Närke, and Södermanland—and in the provinces of Ostergötland and Öland.

The geometrically regular village in Sweden was, by Sigurd Erixon, called 'the sun-divided row-village'.<sup>1</sup> Erixon was correctly aware of its dependence on medieval regulation. The term is, however, somewhat inadequate, because *solskifte* or 'sun-disposition' was not a comprehensive system for land division but merely a special rule for the lot sequence in a village,<sup>2</sup> and further because the alignment of the farmsteads in one or two rows was not the only manner in which to arrange the village.

Already August Meitzen discussed thoroughly the question of the regular quadrangular plans for the village building-plots which are hinted at in the medieval Scandinavian laws and which the learned editor, in the 19th century, of the Swedish codes, C. J. Schlyter, considered the very essence of the *solskifte*. Meitzen did not think that the directions of the laws concerning the sequence of *solskifte* might have required a rearrangement of building sites into geometric regularity, and thus, erroneously, he imagined that only few such regular villages had come into being in the Scandinavian countries, except for the island of Öland.<sup>3</sup> Contemporaneously, the Danish historian Peter Lauridsen declared that the villages of his country had got their shape and appearance by means of medieval regulation.<sup>4</sup> Unfortunately, he expressed himself a little too categorically and associated the regularization too firmly with the particular concept of *solskifte*, which in Denmark early—for instance by the mid-17th century glossator C. O. Weylle—was misinterpreted so as to improperly extend into the sense of a lawful field-division system, instead of being a useful speciality of lotting. This helps to explain why scholars dealing with Denmark and Scania have been, since then, reluctant or waiting to accept the idea that field regulation affected village form there in the Middle Ages in

<sup>1</sup> Erixon, S. 1921, *Skultuna bruks historia*, I, pp. 636–654 (Stockholm); Erixon, S. 1922, *Svensk byggnadskultur och dess geografi*, *Ymer* 42, p. 254 (Stockholm).

<sup>2</sup> Göransson, S. (forthcoming), *Solskifte: A confused concept*, in: Buchanan, R. H., Bulin, R. A., McCourt, D. (eds), *Fields, farms and settlement in Europe*, being the papers of the Belfast Symposium, 1971 (Belfast). Cf. Dodgshon, R. A. 1975, *The land-holding foundations of the open-field system*, *Past and Present* 67, p. 9 (Oxford).

<sup>3</sup> Meitzen, A. 1895, *Siedelung und Agrarwesen der Westgermanen und Ostgermanen, der Kelten, Römer, Finnen und Slawen*, III, pp. 527–555 (Berlin).

<sup>4</sup> Lauridsen, P. 1896, *Om gamle danske Landsbyformer*, *Aarbøger for Nordisk Oldkyndighed og Historie* (Kjøbenhavn).



any decisive way.<sup>5</sup> As far as Sweden is concerned, the view that the regular village was created by the medieval *solskifte* is internationally taken.<sup>6</sup> Again, the wry and misleading fact of this conception is, however, that also the Swedish scholars have failed to distinguish between the *solskifte*, which was a secondary component, and the superior institution of a legal land-division system within which the regulated building-plots carried the significant function of a guiding model for size and ratio in the village; the very element of *solskifte* was not the conclusive factor of the regularizational process.

The aim of this paper is to stress the following points.

(a) Regular villages in Sweden and Denmark have been laid out according to geometric patterns and measuring rules, varying regionally and liable to change in the course of time, some of which crop out in the medieval laws and which to a certain degree may be elucidated by topographic and metrological analysis.

b) As to the dating of this settlement regulation there seem to be indications, from parts of eastern Sweden, of a start in the 12th century; this is so far a tentative dating.

(c) Villages with geometric layouts in Scandinavia should certainly be related to types of regular settlements in central Europe and also with regulated villages in England.

(d) Fundamental to the understanding of the regulation process is the paradigmatic function entrusted to the 'legal' building-plots.

The provincial laws, codified during the 13th and the beginning of the 14th century, contain i.a. the following prescripts regarding the establishment of lawful building-areas, Sw. *tomter*, Da. *tofter*.<sup>7</sup>

The Ostergötland Law says that, the village having been pronounced to become 'legally laid', the two outermost villagers (i.e., the first and the last in the *solskifte* sequence) shall confirm where they want the head boundary-stones to be placed. These boundary-marks were to be put down under oath in the four corners of the total *tomt* area, and this should be done in a sunwise order. 'One shall then proceed after measure', i.e. the boundaries shall be laid out according to legal and settled measurements. The legal measure (= minimum breadth) of a full holding's (*attung*'s) *tomt* was 20 cubits. The Law reveals that one could choose between at least two basic plan types for the layout, a 'quartered' division of the *tomts*, or a 'row-wise' arrangement. A vital element of the plan was the street, which could run through the middle of the (two-row) village, or along the (single) *tomt* row; the street should be — at the least — 15 cubits wide. All the *tomts* must abut upon the street. When lawfully arranged, the *tomts* should form the model — in respect of both size and position ('sun-order') — for all further division in the village: of fields, of fences etc.

The very similar precepts of the Uppland Law demonstrate the two principal motives for the 'lawful laying' of the village: to bring it to 'comparison' or

<sup>5</sup> Cf. Dahl, S. 1942, *Torna och Bara*, pp. 53–56 (Lund); Hansen, V. 1970, *Danmarks bebyggelsesgeografi, Danmarks Natur* 9, pp. 12–23 (København).

<sup>6</sup> Cf. Schwarz, G. 1966, *Allgemeine Siedlungsgeographie*, 3rd ed., pp. 172, 231–232 (Berlin); Smith, C. T. 1967, *An historical geography of Western Europe before 1800*, pp. 237–240, 273 (London); Lienau, C. 1972, Comment on the terminological framework for a geography of rural settlements, in: Uhlig, H. (ed.), *Materialien zur Terminologie der Agrarlandschaft*, II: 2, pp. 218–221 (Giessen).

<sup>7</sup> Cf. the following law editions: Schlyter, C. J. (and Collin, H. S.) (eds) 1827–1877, *Corpus Iuris Sueo-Gotorum Antiqui, Samling af Sweriges Gamla Lagar*, I–XIII (Stockholm — Lund); Brøndum-Nielsen, J., Jørgensen, P. J. (eds) 1920–1961, *Danmarks gamle Landskabslove*, I–VIII (København).

'equality', i.e. to make the *tomt* breadths proportional to the 'village measure', combined with the fiscal assessment, and to bring it into 'right sun-order'. In addition to the four boundary-marks in the corners of the *tomt* area, there should be set out four corner marks for a lane running around the village, 10 to 12 cubits wide, binding it up so that no unfair extension of any *tomt* be possible. If rocky ground or streaming water hampered a *tomt*, the owner should have compensation, i.e. he should be allotted a supplementary width alongside his proper *tomt*. When the village had been lawfully transformed into proportionality, with respect to the widths, and laid in 'true sun-order', the specific *solskifte* of that village, then, says the Law, the *tomt* shall serve as 'mother of the (arable) selion', i.e. the furlongs of the open fields shall have the same comparative division and the same and constant sequence of order as the row(s) of *tomts*.

The Sodermanland Law prescribes that he who wants to make the village spacious shall have the decision (upon the measures), not he who wants to restrict it. If the village is lawfully laid and built up, and two villagers happen to dispute about their *tomts*, he who wishes to follow the 'sun-position' (*solskipt*) shall win, and all crosswise permutation of properties (*humarskipt*) shall be cancelled, because '*tomt* is selion's mother' (in the two aspects of width and order).

According to the Scania Law the house *tofts* of the *mansi* shall be made equivalent by means of the measuring-rope. Some old taxes are to be levied according to the size of the *tofts*. The Sealand Law tells that if a *toft* is impeded by wetness, or if there is a river bank, or a valley, or a hill in it, then it shall justly be wider than its due proportion. The *toft*, being the 'head' of the *bol* (*mansus*), or of a certain fraction of it, shall govern the situation of the 'limbs', i.e. all the selions, out in the furlongs of the fields, on the basis of the adopted succession 'after the sun'.

The Jutland Law, finally, declares that all *tofts* of the village shall have access to the *forte*, the street or green, upon which nobody is allowed to encroach. The *forte* shall be 15 fathoms broad, or as broad as all the shareholders agree about. The boundaries between the *tofts* and the *forte*, and between the *tofts* and the field furlongs, as well as between the furlongs, and so on, are to be fixed by the oath of twelve villagers. If 'sun-order' is going to be imposed on the village, one shall first rope-measure the *tofts*, in such a way that no objection may be raised; but in the case a man's *toft* lot should happen to fall where another man has his buildings, and the latter is not willing to evacuate, then the former will be entitled to take due recompense from the other one's vacant land in the fields, 'a rope for a rope'. 'The same manner after which the *tofts* are arranged in the village, shall be applied to all field division.'

It is obvious that a settlement regulation of this kind cannot always have meant just a modification of an existing pattern, but must often have implied a radical transformation of the village structure. Not seldom it led to a shift of site; this is testified by a lot of field-names, alluding to ancient *tofts* and former village-sites, and the Jutland and Ostergötland Laws actually provide for the case of transplantation, the deserted *tofts* and the street presupposed to be subject to division and re-use as part of the arable fields.

As a very general statement we might argue that the typical Danish form was the green-village and that the most common Swedish plan type was the single-row street-village. The east Swedish settlement pattern was more strongly impressed with regularity, whereas many Danish and Scanian villages probably far better preserved their nature from times before the regulation process.



A couple of figures may illustrate the planning principles and metrological qualities of regulated Swedish villages.<sup>8</sup> Figure 1 shows the village of Norra Back on the island of Öland as it looked in the beginning of the 19th century.<sup>9</sup> It was once assessed at the amount of 8 full *mansus* units (*attungs*). The original *tomt* plan is drawn with intermittent lines. Most certainly it was laid out with a measuring-pole of 6 cubits at a rate of 20 poles per *attung* in breadth, making the total length of the village row 960 cubits (499.2 m); the intended length of the tofts seems to have been 48 poles or 288 cubits. The length of the cubit (ell) was probably c. 52.0 cm. This medieval plan was located on a new site, earlier sites being indicated by field-names to the east of the village. The larger plan on the map is an extension from as late as about 1698, performed according to the Swedish standard ell of 59.3 cm at the rate of 6 ells per each of the 192 basic fraction-units in width, and embracing a prolonging of the tofts up to 600 modern ells. As shown by this case, the function of the regulated tofts had not yet got obsolete by this time; as a matter of fact it did not fade out until the 19th century.

Figure 2 represents the village of Forkarby in the province of Uppland in the middle of the 18th century. The village was altogether rated at 24 *marklands* (192 *öreslands*) within the ancient land assessment system. The tofts are arranged in four blocks, each one containing lots for six marks of land (a *sexmark*). The shape of the tofts is slightly trapezoid because of the different modules chosen for the respective ends of them, the main rule being south of the street 6 ells (one pole) per *ore* of land in the northern ends and 7 ells in the southern ends; the length is 240 ells. The ell was here 55.4 cm long. The block to the north of the street has its special measures. An expected system of lanes surrounding the whole complex, as suggested by the law of this province, can be traced. The village occupies in a typical way the south-facing slope of a morainic hill, and the plan was probably laid out in association with an older site.

When did it commence, this regulation movement? Swedish geographers have lately advanced the theory that size regulation of building-plots took place in eastern Sweden as early as in the 7th-8th century.<sup>10</sup> This seems doubtful and appears not to be supported by archaeological findings.<sup>11</sup> More probably the principle of geometrically defined tofts belongs to a period somewhat, but not much, earlier than the codification of the laws. The metrological evidence from the above-given examples tends to this conclusion. The cubit (ell) of 52.0 cm, the basic unit of the layouts of Öland, will seem to have been introduced into the architecture of the churches in this province about the middle of the 12th century, replacing an old customary cubit (c. 47.0 cm) of Byzantine

<sup>8</sup> As for the metrological method of analysis see Hannerberg, D. 1963, *Agrar-morfologisk mikroanalys, Ett forskningsprogram*, *Ymer* 83 (Stockholm); Helmfrid, S. 1972, *Historical geography in Scandinavia*, in: Baker, A. R. H. (ed.), *Progress in historical geography*, pp. 85-86 (Newton Abbot). A Danish application with a convincing reconsideration of the regulation problem in Denmark is Hastrup, F. 1964, *Danske lantsbytyper, En geografisk analyse* (Århus).

<sup>9</sup> For a survey of village plans in Öland see Goransson, S. 1971, *Village planning patterns and territorial organization: Studies in the development of the rural landscape of Eastern Sweden (Öland)*, Acta Univ. Upsal., Abstracts of Uppsala Diss. from the Fac. of Soc. Sc. 4 (Uppsala).

<sup>10</sup> Hannerberg, D. 1966, *Bytomt och samhällsorganisation*, *Ymer* 86 (Stockholm); Lindquist, S.-O. 1970, *The ancient rural landscape*, in: *National Atlas of Sweden*, 131-132, pp. 5-7, 9 (Stockholm); Helmfrid, S. 1972, *op. cit.*, pp. 68-70, 79-80.

<sup>11</sup> Baudou, E. 1973, *Arkeologiska undersökningar på Halleby*, 1, Acta Univ. Stockh., *Studies in North-European Archaeology*, 3 (Stockholm).





Fig. 1. The village of Norra Bäck, parish of Runsten, province of Öland, Sweden, after a map of 1801. Dotted lines denote the medieval plan according to a map of 1641. Measurements in cubits or ells (*alnar*) of c. 52.0 cm (medieval) and of 59.3 cm (referring to the extended plan from about 1698). Big numerals specify the *solskifte* order in the 18th century, small ones the situation of the same units in the *tomt* row in 1641

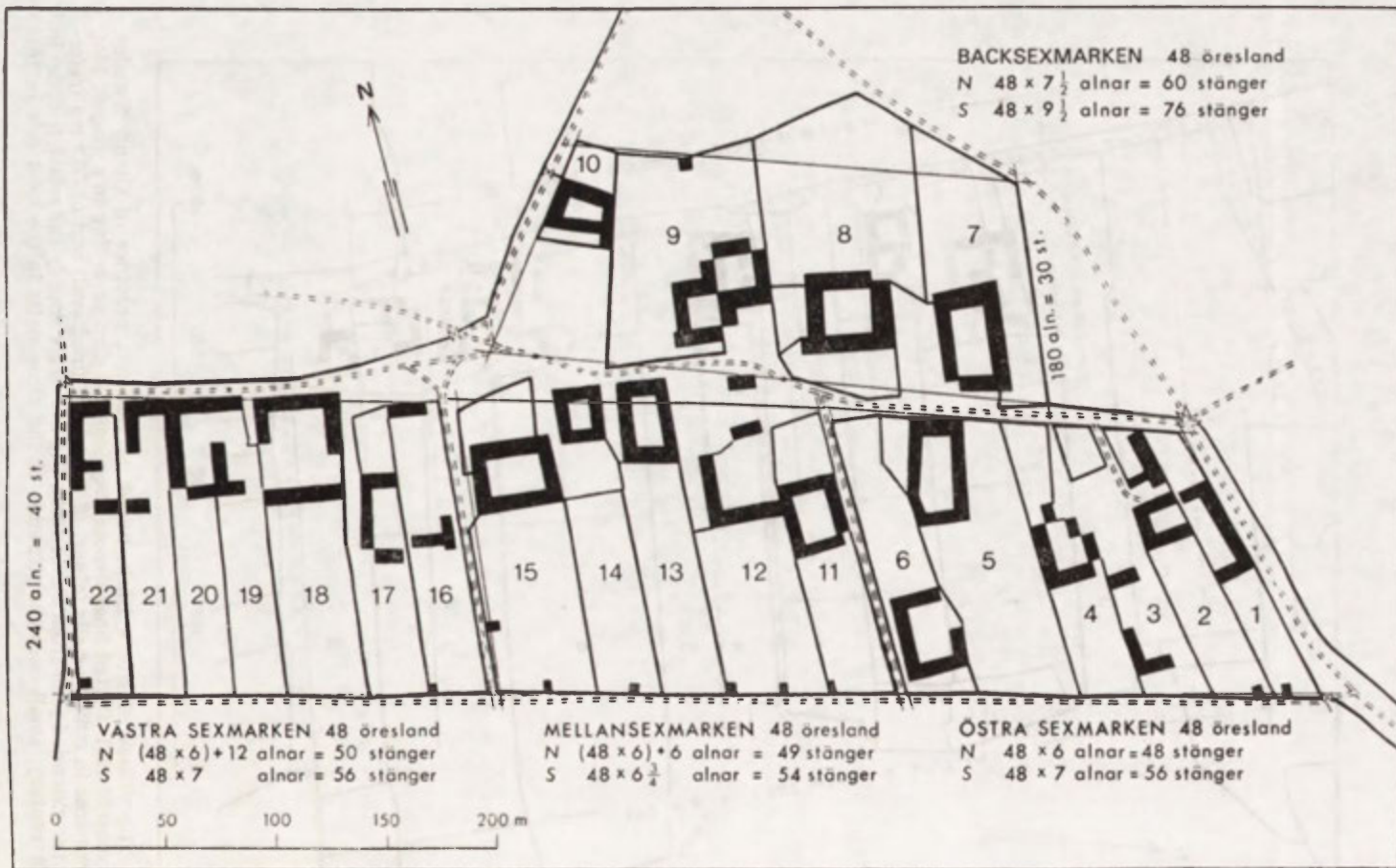


Fig. 2. The village of Forkarby, parish of Balinge, province of Uppland, Sweden, after a map of 1769-1770. The measurements (thin lines) of the four compartments, each called a 'six-marks' division, in ells (*alnar*) of 55.4 cm and poles (*stänger*) of 6 ells. The numerals compose the *solskifte* sequence.

derivation.<sup>12</sup> The ell of 55.4 cm, underlying regulation in east-central Sweden, is documented from Gotland in the 13th century.

The regular villages in Scandinavia ought not to be separated from the broader European context of planned or regulated settlements, such as the medieval *Strassendörfer* and *Angerdörfer*, so prominent in the landscape pattern of parts of central and east-central Europe.<sup>13</sup> Most promising investigations are in progress in Britain concerning the age and metrological construction of regulated street and green villages in northern England.<sup>14</sup> Plausible genetic links between the similar developments in the various countries are likely to emerge.

Shape itself is not the only important aspect of the regulated village. The function of the toft, when in 'legal arrangement', as 'mother' or 'head' of all component parts of the holding is an essential clue to the problem. The idea of interlocking building site and property division for social and fiscal purposes was probably not autochthonous in Scandinavia.<sup>15</sup> Profound historic roots of this idea are suggested by the phrase 'mother of the *hube*' for building lots in south-west Germany, where documents mention 'legal (building) areas' as early as in Frankish times (9th century).<sup>16</sup> The 'sun-order' arrangement, predominant in Sweden and frequent in Denmark and England, was not the crucial point of the system, but a practical extra constituent of it.

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<sup>12</sup> Goransson, S. 1973, Metrology, in: *Långlöts kyrkor*, Sveriges Kyrkor, Öland, II: 1 (Stockholm); Goransson, S. (forthcoming), The metrology of the churches of Lot and Egby, in: *Lots och Egby kyrkor*, Sveriges Kyrkor, Öland, II: 2 (Stockholm).

<sup>13</sup> Cf. already Meitzen, A. 1895, *op. cit.*, pp. 534, 554–555. For a metrological approach to the study of these types of villages see Mertin, H. 1960, *Gehöftbreiten als Zeugen der Siedlungsgeschichte*, *Forschungen und Fortschritte* 34:7 (Berlin), and Szulc, H. 1968, Studies on the Silesian village in the light of plans from the beginning of the 19th century, *Kwartalnik Historii Kultury Materialnej* XVI:4 (Warszawa).

<sup>14</sup> Allerston, P. 1970, English village development: Findings from the Pickering district of North Yorkshire, *Transactions of the Institute of British Geographers* 51 (London); Roberts, B. K. 1973, Planned villages from medieval England, in: Baker, A. R. H., Harley, J. B. (eds.), *Man made the land* (Newton Abbot); Roberts, B. K. 1973, Village plans in County Durham: A preliminary statement, *Medieval Archaeology* XVI (1972) (London); Sheppard, J. A. 1973, Field systems of Yorkshire, in: Baker, A. R. H., Butlin, R. A. (eds.), *Studies of field systems in the British Isles*, pp. 183–184 (Cambridge); Sheppard, J. A. 1974, Metrological analysis of regular village plans in Yorkshire, *The Agricultural History Review* 22 (Canterbury).

<sup>15</sup> The question of the village as a paradigm is discussed from the English viewpoint by Roberts, B. K., in: *Village morphology in Northern England 1600–1850* (forthcoming).

<sup>16</sup> Ernst, V. 1926, *Die Entstehung des deutschen Grundeigentums*, pp. 76–86 (Stuttgart).





## GREEN VILLAGES IN DENMARK — PLANNED OR SPONTANEOUS? AN OVERVIEW

VIGGO HANSEN

As a settlement type the Green Village is still a widely spread phenomenon in Denmark, most frequently met on the better soils of the Danish islands and in the eastern part of the Jutland peninsula. Its conservation even up to-day through 200 years' of agricultural evolution is more or less due to an enclosure practice which allowed most farmsteads to remain in the village when the land round 1800 was redivided among the farmers like spokes on a wheel (star partition), the belongings of each farm stretching from the village and widening away from it. Even if the farm itself later on moved to the middle of its land, part of the old construction often remained in the village to house a farm labour family. While nothing is left of the previous open field system, the village itself still lies there as a relict of a social, economic, and cultural society long time passed. From the ground as well as from the air one can still detect the village green with its surrounding farm houses, even if the green has often been invaded by cottages and in modern times by craftsmen's houses and by small shops.

Quite natural the existence of a village green has given rise to several basic questions as: How is a green defined? — What was the function of it? — When was it established? — And for what reason?

These questions have created much discussion and many disputes among geographers and historians in Denmark, and different opinions have been forwarded. But before going into these, a few words must be said about the occurrence of the word 'green' itself in the old records. The Danish word for green is *forte*, and it occurs several times in old Medieval laws going back to the beginning of the 13th century. From these laws the following quotations can be made:

*One:* No man is allowed to build on the forte, because forte belongs to all men.

*Two:* If part of the field is taken in as a toft, forte must be made from it too.

*Three:* A peasant farm lying outside the village must make forte from his land.

*Four:* In case of a complete desertion of the village, the forte shall be divided as other land between villages and between farmsteads.

*Five:* Forte shall be fifteen fathoms wide, or as wide as all agree to.

From these quotations the following conclusions may be drawn. The forte was common, public land, and reserved land as well. The forte was not completed once for all, because whenever new farms were added to the village, land should also be added to the forte.

The word forte turns up again in the 16th and 17th centuries, when village regulations mention the ban on cutting grass or turf from the forte except in

agreement with all men, and this ban also included the digging of clay, sand, and gravel. Possibly the word had here widened its meaning to include public roads leading across the village land.

The size of the forte: As mentioned above the forte should be fifteen fathoms wide (90 ft. or 28 m) or as wide as all men agreed to. The narrow size compares well with that of the plans of the street green villages. The broad green village plans were much bigger, from a hundred to 250 m wide and from 125 to 500 metres long, enclosing a green of up to 10 or 12 ha. (For this see the illustrations).

The form of the forte: Nearly any form is present: rounded, elongated, square, rectangular, with one or more angles, etc. Very often the forte is a shallow depression on the land surface, has a pond or two in the middle, now and then even a small stream runs through it, and this is very important: the form and size of the depression most often seems to have determined the configuration of the village green and must have been an important locational factor for the village site.

The function of the forte: The old laws are silent on this point, but no doubt the forte must have supplied the village with clay and often straw for building purposes, as well as water for washing and cleaning agricultural tools. Small animals were tied there to be fed, and it was the feeding place for geese and ducks, while untethered animals were not allowed to stroll there. Furthermore it was the meeting place for the villagers, and specially the place in front of the church was protected as an assembly place. Later on one sees that the first village school was built on the forte, and also the fire engine house.

The age of the forte: The forte is known to have been a compulsory detail of the village plan before 1200 A.D., when the king legislated for it, and this legislation was still valid, when new villages were established during the 13th and 14th centuries. It has been proposed that the tradition was introduced from England during the 11th and 12th centuries, when strong political and cultural relations existed between this country and Denmark.

At this place a few comments shall be made on the different opinions that have been put forward concerning the origin of the forte. O. Olufsen (1823) said that the Danish village was a complete form from its very beginning — that it was planned. This theory can be dismissed of from the early legal sources. P. Lauridsen (1896) said that the Danish village got its form from a Medieval regulation called sun-division. Also this theory can be dismissed of partly, because the sun-division was not accomplished all over the country, and, moreover, not in all regions where the reigning monarch was the village lord. H. Larsen (1918) said that the village got its form little by little through the addition of new farms, and he is at this point in accordance with the wording in the Medieval laws. F. Hastrup (1964) found that an early regulation had taken place in many villages as a result of a unification of several smaller settlements into a new regulated village croft site. He stated the time for this regulation to be Medieval, probably early 13th century. The theory is supported by Goransson for Sweden.

From many studies of enclosure maps and earlier cadasters, mainly in Jutland, the present author, Viggo Hansen, has found strong evidences of villages that have grown spontaneously by adding of new farms (see below), and for the moment two different theories are discussed of the creation of green villages, a growth theory and a plan theory, not necessarily contradictory theories. This can be explained by the following reasoning. It is a fact that the number of farms in a village has increased between Medieval times and the 17th century through a partition of the original fewer farms. Twin farms are,



for instance, a common feature on the enclosure maps. In other cases new farms were established in continuation of the row or on the opposite side of the green. This explains well the often scattered location of farms belonging to the same bol in a bol-divided village. It is not unreasonable to state that the partition was carried out by a regulation of the tofts. Even a sun-divided village may have undergone the same procedure of partition and regulation at different times.

Through the last ten years or more, Danish village research has demonstrated definitely that the rural settlement pattern in Denmark has undergone important changes during the centuries investigated. Whenever digging in the old records one finds evidences of deserted villages, often located to the outskirts of the present village land. It has also been shown, as done by K. E. Frandsen for the island of Falster, that the villagers from these deserted settlements moved to better located village sites, but kept their rights to till the old, left land. Such findings accord well with the wording of the Medieval laws, when they mention what should be done with a deserted village. This regrouping which resulted in a concentration of the farmsteads in bigger villages has not yet with certainty been dated, but it is generally agreed upon that the 13th and 14th centuries were a resettling period in Denmark without it being confined to this time-span only. New research may even put it earlier, but on the other hand, one village is known to have been moved to its present location as late as round 1500 A.D.

The question is now: Did this settlement agglomeration lead to a regulation of the toft plots thus indicating a planned move. F. Hastrup was convinced that the villages on the island of Falster had been planned, and he built his arguments on the occurrence of regulated tofts on the enclosure maps from the 1790's, taking for granted that the regulation was an heritage from Medieval times, when the village came into existence. Part of his argumentation rests upon the results of a metrological research on the basis of enclosure maps, correlated to the figures in a 17th century cadaster. His findings look rather convincing, even if some of his assumptions may be questioned.

The author's own research results, which comprise many parts of the country, can shortly be summarized as such: In some cases only part of the village or a group of farms are seen to have regulated tofts, while the rest of the village is unregulated. In other cases the whole village land or only one or two fields are regulated, while the tofts are unregulated. Again in many villages big and small farms are lying side by side round the green, while other villages have big farms lying at one side of the green and small farms at the other one. Nearly any pattern seems to be possible.

In a work like this which aims at unveiling traces of regulation or planning supposed to have taken place long time before any records are available, a very disturbing factor is the repeated use of an equalization of land between farms throughout the history. An equalization intended to give all tenants in the village an equal share of the land and an equal rent payment. A landlord would be inclined to regulate the land in case he was the only owner of the village, and as a modified sun-division was normally applied in this procedure such examples may be misinterpreted for an old planning. Even the 18th century has given examples of equalizations. A selection of these findings are demonstrated in the following examples with accompanying figures.

1 The village of *Volsted* in northern Jutland has a large, oval green of 12 hectares. In 1688 its 12 farms are seen to be regulated as to ploughland, tofts, hay land, and grazing, but they were not equalized. Seven farms had size  $x$ , 3 farms had size  $1.5x$ , 1 farm had size  $2x$ , and 1 size  $0.5x$ .

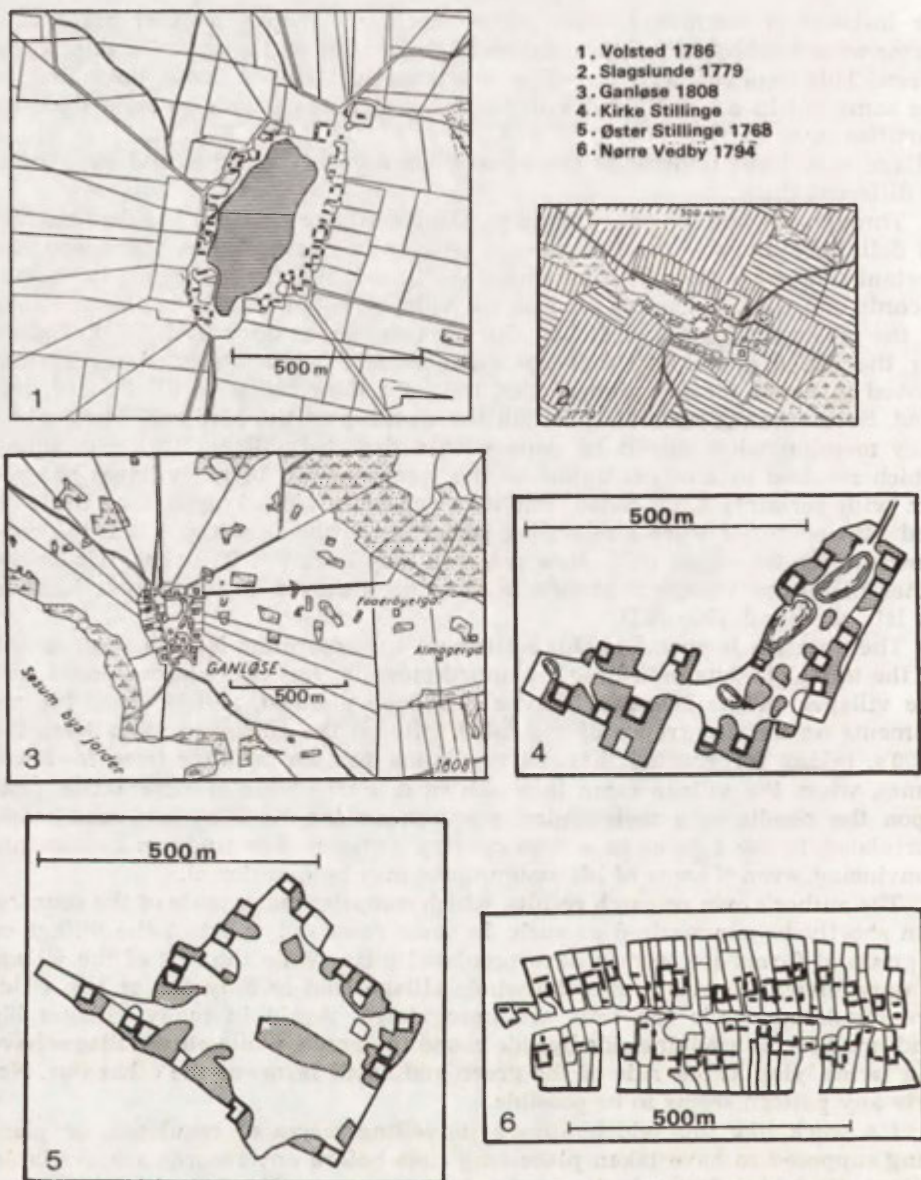


Fig. 1-6

2. *Slagslunde* northwest of Copenhagen had an irregular green in a shallow depression with a small stream running through it. Out of 12 farms 6 were always neighbours in the field, but not in the village. An equalization had taken place in the early 18th century.

3. *Ganløse*, a neighbour village to *Slagslunde*, had its 18 farms regulated and equalized in the field, but not sun-divided and it was unregulated as to tofts.

4. *Kirke Stillinge* (Church Stillinge) on the west coast of Sjælland was bol-divided, and its 14 farms constituted 6 bols of equal land value. The participants



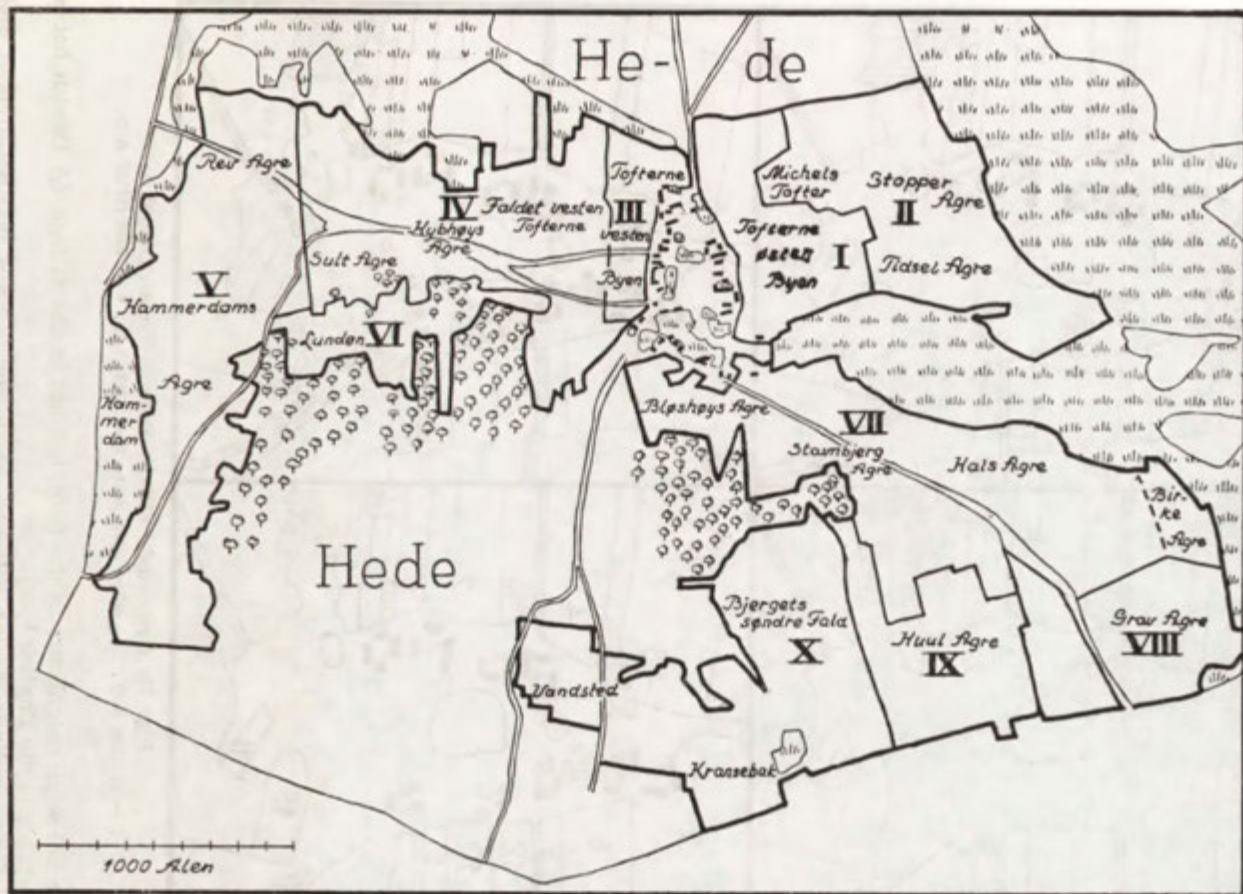


Fig. 7a Grindsted township. Open field pattern 1688 (reconstructed)

<http://rcin.org.pl>



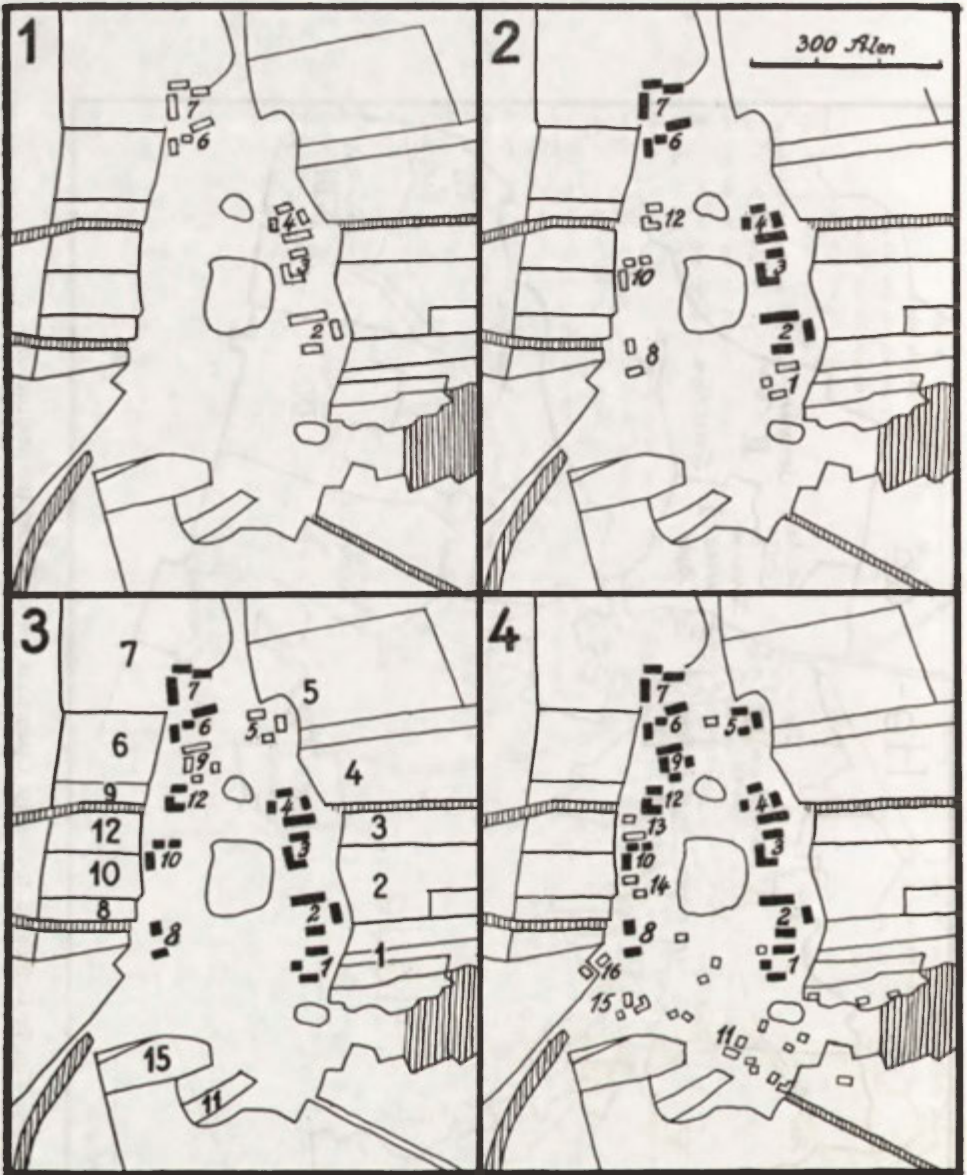


Fig. 7b Grindsted. Village growth reconstructed

1 — c. 1200 A.D., 2 — after 1300 A.D., 3 — 1553 A.D., 4 — 1688 (1810) A.D.

in the bol were neighbours in the field, but not in the village. (A Danish *bol* is comparable to the English *hide*).

5. *Øster Stillinge* (Easter Stillinge), neighbour to No. 4, was bol-divided, and its 18 farms constituted 7 bols of nearly equal value. The participants in the bol were neighbours in the field as well as in the village except for two pairs.

6. *Nørre Vedby* (North Vedby) on the island of Falster and investigated by F. Hastrup, is a street green village supposed to have been planned in Medieval times. A unit of 66 feet of 62.77 centimetres seems to have been used in

a toft regulation, even if farm sizes differ very much. There is no correlation between toft size and land area.

7a and 7b. *Grindsted* in Hammer parish, North Jutland, had 12 farms and some cottages. Farms No. 1 to 5 had most of their land to the east of the village, farms 6 and 7 to the northwest and farms No. 8-9-10-12 to the west. The partition in the furlongs showed no sign of regulation or regularity between the farms, with the exception of field No. VII which was sun-divided between all farms, big and small. In most fields the full farms were allocated three to four times as much land in the furlongs as were the part-farms, but again there was one exception. In field No. V, Hammerdam acres, the part-farms in the western row (the numbers 8-10-12) tilled 60 per cent, while the full farms had only 40 per cent. This priority to the part-farms in this case can be explained by the fact that due to sand drift in late Medieval times they moved to become part of the village of Grindsted. The loss of Hammerdam acres was later substituted by the intake of field No. VII, in which all farms got a share according to their size. The deserted village was probably a lost Hammer settlement, the name of which has only survived as a parish and church name, and then in the field name of Hammerdam. Later records from 1553 show that new farms now had been added and still more by 1688.

#### CONCLUSION:

The Danish green villages have been subject to regulations and equalizations several times through the history, and therefore it is difficult to decide whether a green village has been planned as a complete form from its very rise. There are more evidences to show that green villages are the results of a progressive growth and of an agglomeration of smaller settlements into bigger ones.

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The village of Green in Denmark is situated in the north-western part of the country, about 100 miles from Copenhagen. It is a small village of about 100 inhabitants, situated in a beautiful landscape of rolling hills and meadows. The village is known for its green fields and its peaceful atmosphere. The houses are built of brick and have a traditional Danish style. The church is a simple, white building with a steeple. The village is surrounded by a forest of tall, thin trees. The water is clear and the air is fresh. The village is a good place to live and a good place to visit.

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## NEW ASPECTS OF THE STUDY OF DESERTED PLACES

HELMUT JÄGER

Generally speaking there are two methods of research into deserted places which are alternately gaining ascendancy and rivalling each other in a dialectic process. The older branch, at all times important and living, is characterized by empirical studies of deserted settlements and fields. The assembling of the rich documentary, literary, cartographic and field material of this branch has recently been completed by medieval archaeology. An instructive and very comprehensive archaeological study has just been published by Janssen, *Studien zur Wüstungsfrage im fränkischen Altsiedelland zwischen Rhein, Mosel und Eifelrand*. A major feature of the book is the evidence of some processes of desertion prior to the late medieval ones.

The other branch of research, often connected with empirical studies, is based on theories which give general explanations of the total phenomena observed. As desertions are part of regional processes, geographers were involved in both methods of research. In Central Europe, at least, they emphasized the late medieval processes as these have been of major importance in the forming of modern landscapes. I shall also restrict my paper to late medieval desertions of Central Europe. Drawing parallels between different countries in the present state of research will not yield much as far as the important questions of regional causation are concerned because we can take for granted that the general and special circumstances and processes differ fundamentally from one country to another. Even research which is limited to Central Europe should, besides effort to develop a general theory, continue to include regional studies, for the evolution of settlements and field patterns, and the desertion process, differ greatly from one region to another.

Since Alfred Grund in 1901 based his economic theory on deserted Austrian villages a number of scholars, like Abel and Mortensen, have made theoretical statements about the large group of medieval desertions. All theories aimed to explain the cause. Generally accepted as the economic theory is the version of Abel; some other theories such as the climatic one are not yet disproved for all regions. Common to all theories is the difficulty in giving proofs from contemporary documents. Most of the regional records of deserted places do not yield the necessary material. Hence even our most painstaking collections of records which refer to deserted villages (e.g. Neuss 1969, 1971) contribute only a little to the elucidation of causes.

Insight into the causation and with it progress in theory will not come from exclusive investigation of deserted or shrunken settlements of a given region. An investigation of temporal sequences of regional patterns in the form of cross-sections, including deserted as well as non-deserted places, is important in

order to get ideas about the conditions of change and a quantitative impression of the impact of desertions on the landscape. As well as the time of desertions and the preceding period one should examine the regional pattern after the end of the desertion process and during the following period in as much as the subsequent fate of deserted sites is of importance for the question of causation. If, for example, all the deserted sites in a region become resettled, the cause can hardly be people's tendencies to concentrate smaller settlements into larger ones. In other words: studies of deserted places should comprise a study of all settlements of a given region and time with special attention to functional and quantitative aspects. As man creates, develops and changes the settlements and their areas, demographic, political, social and economic appearances are of special importance. Deserted settlement research should again become integrated into the study of the evolution of cultural landscape as Alfred Grund and Otto Schlüter already showed in 1901 and 1903. A number of contemporary scholars also take this view.

A bibliography of publications in the German language about deserted settlements would comprise about 2000 items. A good basis for theory, you might think. But I cannot agree, for you will find, for instance, only very few publications in which the number of farms and their size in deserted and non-deserted villages are listed, compared, related to each other and used as a basis for further arguments. Some papers by Wolfgang Prange belong to the rare exceptions. All our well-known theories still lack a basis, because most of our sources do not give enough information. To reconstruct a regional pattern as it was in the time of a farmer's generation would be the ideal, difficult but not impossible to attain. The documents of at least some regions permit reconstructions, which are usually rough, but give enough evidence for the time of late medieval desertions.

In the German speaking countries an ideal source material is given by the medieval *Urbare*. An *Urbar* is a territorial or manorial census and record of land and revenue. I have investigated four *Urbare*<sup>1</sup> and three similar documents<sup>2</sup> of the Würzburg and Bamberg regions in Franconia. All are of the 14th and 15th centuries, the time when most of the medieval desertions took place. Some of these records allow us to take into consideration not only the quantity of farms in the villages but also their legal and genetic status and in addition their size. You can see that among the deserted settlements the younger and smaller farms of the *feodum* type were represented in greater quantity than the older and greater farms of the *mansus* type. A feodum or feodum (in German a *Lehen*) was in Franconia, where the expression originated, half of a *mansus* or *Hufe*. The feuda were typical farms founded in the period around 1100–1300. Permit me the additional remark that the expression *Lehen* (and the institution of *Lehen*), possibly with a greater acreage, was transferred during the Middle Ages from Franconia to the east, and eventually to the area between the rivers Saale and Elbe.

Since in Franconia two feuda corresponded in size to one *mansus* and one feodum with two *domus inquilina* (= *Selden*) it is possible to measure and compare the size of farms and therefore of settlements including their fields. If possible, I convert the number of smaller farm units of a settlement to my standard measure of *mansus* to obtain a general unit for comparison. If, for

<sup>1</sup> Bamberg A 1323/28; B 1348 — Ebrach 1340 — Langheim 1390.

<sup>2</sup> Würzburger Lehnbuch 1303–45; Zins- und Gültregister der Deutschordenskommende Prozelten 1379; Wertheimer Lehnbücher 1444, 1453/54 (See Sources).



example, a deserted village consisted of 11 feuda and two *domus inquilina*, in other words 13 agrarian units, it was only a quarter of the size of a non-deserted village, which was composed of 24 *mansi*. In the area of the rich monastery of Ebrach, for example, the possessions of which were located in the Steigerwald and on the more fertile Franconian plateau, the ration of size between the greatest deserted village with 10 *mansi* (Ronebach) and the greatest non-deserted village with 84.75 *mansi* (Herlheim NW of Gerolzhofen) was 1 : 8.5. A similar ratio exists among the other deserted and non-deserted settlements, not only in the area of Ebrach, but also in most of the other parts of Franconia. This result of our examination means that the so-called desertion quotient of 25, for instance, which indicates a loss of 25% of the settlements, in reality implies only a loss of approximately 4% of agricultural produce, if the size-ratio of deserted to non-deserted places is 1 : 8. As in German publications desertion quotients are generally related to a period of five or more generations, the loss of peasants during one generation was on an average only a fifth. By these considerations in Franconia, where in a recently published map of Abel (1971, p. 302) the desertion quotient generally ranges from 20 to 39, the real loss of agricultural produce during one generation of peasants shrinks to a minimum of around a few per cent. As roughly half of the desertions had only a loss of their buildings, while the fields without or with partial desertion became attached to a neighbouring village which used them, the loss of agricultural produce was even less, all the more because during desertions in one part of the country there was in others substantial clearing of woodland to make fields and a subdivision of land as an indication of a growing population. These activities go well with large and populous villages in the more fertile districts of Franconia. In the valley of the river Main and on the Franconian plateau there were in the 13th and 14th centuries a great number of villages each with some hundred inhabitants and several with 400 to 1000 villagers or more. All in all the real loss of agricultural produce in Franconia during the so-called period of desertions amounted to about one to two per cent during one generation of peasants. This amount was far less than that produced by the contemporary phenomenon of 'social fallow' (*Sozialbrache*) in a number of regions of the Federal Republic of Germany.

The agrarian landscape of the greater part of Franconia in an area of about 20,000 km<sup>2</sup> was characterized in the late Middle Ages, at least in the 14th century, more by normal conditions and populous villages than by crisis and depopulation as the well-known theory of the demographic and agrarian crisis suggests. Do not misunderstand me. I am not saying that there was no crisis and heavy depopulation in Central Europe in general. There are clear proofs of heavy desertions and depopulations in a number of regions, but for the greater part of Franconia at least the documents do not indicate any crisis. I think one aim of future research should be to reexamine our known theories by regional work with emphasis on a statistical approach and scholarly techniques as perfected by historians and geographers, even if these studies seem to be rather orthodox for some of our friends. We need second, often enough a first, critical examination of our documents. At least one motto of future research should be: back to the sources.



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## RÉPARTITION ET ÉVOLUTION RÉCENTE DES VILLAGES-RUES ET VILLAGES À PLACE OVALE EN MAZOVIE

MARIA KIEŁCZEWSKA-ZALESKA

D'après de nombreuses études sur l'habitat en Europe centrale et septentrionale, présentées au cours de différents colloques et dans plusieurs publications, les différences qui existent entre les types de villages dépendent du degré de régulation de leurs plans intérieurs et de leurs finages.

Un habitat régulier, mesuré et établi d'après un plan préalablement défini diffère d'un village qui a évolué spontanément. Ce phénomène, noté par les géographes suédois (Henneberg, Helmfrid), danois (Hansen), allemands (Müller-Wille, Krenzlin), anglais (Thorpe, Schepherd) a été aussi observé en Poméranie de Gdańsk (Kiełczewska-Zaleska) et en Silésie (Szulc).

Parmi les villages à formes régulières, les plus fréquents sont ceux avec une place en forme de rue plus ou moins large et ceux avec une place ovale, triangulaire ou rectangulaire. Ils voisinent souvent l'un avec l'autre et on les trouve dans différentes régions. Ils présentent un très grand intérêt, car leur genèse, discutée depuis Meitzen est toujours incertaine.

Ce n'est qu'en élargissant le terrain d'étude et en confrontant les observations que l'on pourra fournir de nouvelles données qui confirmeront les opinions des chercheurs.

La Mazovie n'est pas une région où les villages-rues et les villages à place ovale sont nombreux et bien développés. Mais au début du XIX<sup>e</sup> siècle il en existait davantage.

La réduction du nombre de ces villages et leur disparition complète dans quelques régions résultent des réformes agraires du XIX<sup>e</sup> siècle. Elles ont changé le paysage rural et donné naissance à de nouveaux types de villages et à de nouvelles structures agraires. L'accroissement de la densité de la population rurale au XIX<sup>e</sup> siècle a également provoqué de grands changements.

Quelques traits caractéristiques, vestiges du passé, sont néanmoins visibles dans le paysage rural actuel. L'analyse des cartes cadastrales et de la carte topographique du début du XIX<sup>e</sup> siècle facilite une connaissance plus exacte des formes anciennes. D'après ces cartes, la Mazovie était en grande partie couverte de petits villages et de hameaux, tandis que les villages réguliers, plus grands, construits autour d'une rue ou d'une place ovale, constituaient de petits îlots parmi les hameaux.

Ce grand contraste entre les types d'habitat en Mazovie est en rapport avec la structure de la propriété foncière. L'*Atlas historique de la Mazovie* (1970) nous présente la situation foncière à la fin du XVI<sup>e</sup> siècle (Fig. 1). Elle a peu changé au cours des siècles suivants. Les environs de Varsovie ont subi une importante évolution des structures agraires (Leskiewicz, Smoleńska 1977), tandis que dans les autres régions, surtout périphériques, l'aspect caractéristique du XVI<sup>e</sup> siècle a persisté, avec de petits changements, jusqu'au début du XIX<sup>e</sup> siècle.

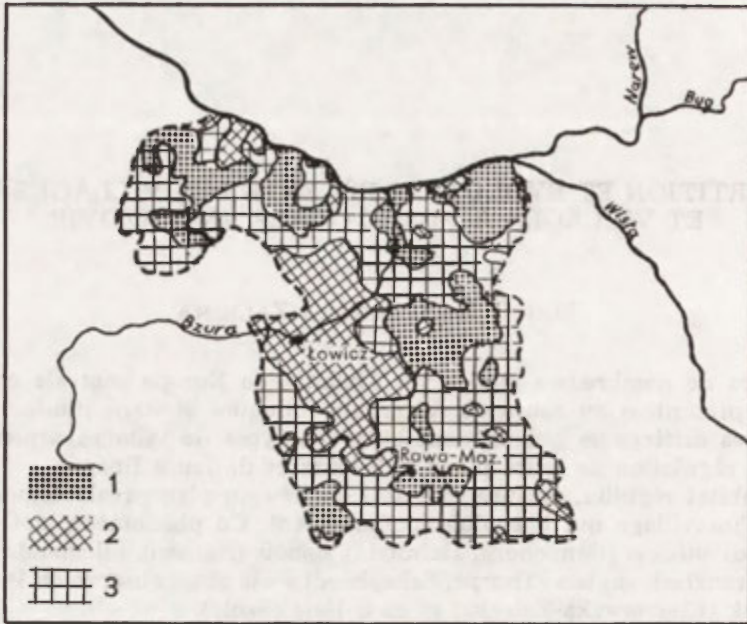


Fig. 1. La propriété foncière en XVI<sup>e</sup> s. (d'après l'Atlas Historique, 1973)

1 — Propriété de la Couronne (royale) 2 — Propriété d'Église (ecclésiastique), 3 — Propriété de la noblesse

Au XVI<sup>e</sup> siècle la grande propriété foncière occupait 34% de la Mazovie (propriété royale 14%, propriété ecclésiastique 20%) et tout le reste, c'est-à-dire 66%, appartenait à la petite noblesse qui souvent ne possédait qu'une partie d'un village ou quelques parcelles situées dans différents villages. Les propriétés de la petite noblesse ne se distinguent pas beaucoup de celles des paysans. Mais la situation sociale et politique de ces deux classes était différente: la petite noblesse avait le droit de vote à l'élection du roi et n'était pas chargée de corvée. La structure de la petite propriété résultait de l'action de colonisation organisée par les ducs de Mazovie (le duché de Mazovie a été gouverné par une ligne de la dynastie des Piast jusqu'à 1526) vers la fin du Moyen Âge. Des colonistes étaient capables de défendre les frontières du duché et d'organiser des fermes agricoles familiales. Ils ne recevaient pas beaucoup de terre et, par suite de divisions, ventes et héritages, les fermes devenaient de plus en plus petites. Les villages étaient petits et grandissaient sans plan régulier préalable. Ils prenaient la forme de hameaux irréguliers, construits le long d'une rue ou autour d'une place.

Ce type d'habitat occupait surtout le nord et l'est de la Mazovie, mais on le rencontrait parfois dans les autres parties de la région, même dans le sud. Le village de Biala Wioska (district de Skierniewice) est un exemple de l'évolution de ce type d'habitat (Kietczewska-Zaleska 1968).

Le trait caractéristique de ces villages était leur petite dimension. Au début du XIX<sup>e</sup> siècle ils ne comptaient pas plus de 15 maisons. Les évaluations effectuées d'après le recensement de 1822 nous indiquent la grandeur moyenne des villages dans les paroisses de la région située au sud-ouest de Varsovie (au XVI<sup>e</sup> s. voïévodie de Kawa). La carte (Fig. 2) illustre ce phénomène. Elle montre les grands contrastes entre les paroisses quant à la grandeur moyenne des villa-



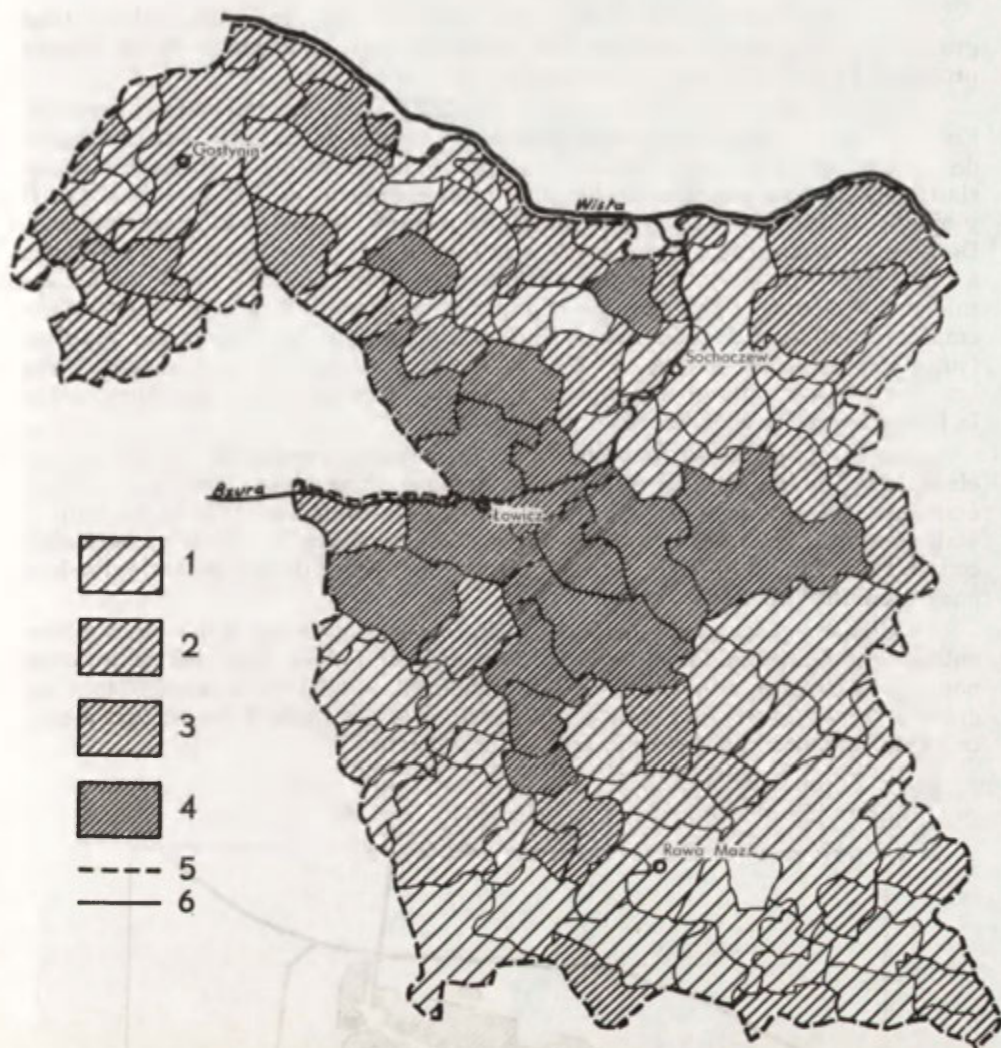


Fig. 2. La taille moyenne des villages en Mazovie du Sud en 1882

1 — Moins de 15 maisons, 2 — 16-20 maisons, 3 — 21-25 maisons, 4 — plus de 25 maisons,  
5 — Limites de la voïévodie de Rawa en XVI<sup>e</sup> s., 6 — limites des paroisses en XVI<sup>e</sup> s.

ges du début du XIX<sup>e</sup> siècle. Il y a des paroisses où cette moyenne est quatre fois plus grande que dans d'autres. Les 18 villages qui appartenaient à la paroisse de Dmosin au sud-ouest de Łowicz n'avaient que 13 maisons en moyenne et, sans compter le chef-lieu de la paroisse, seulement 10 maisons. Les villages de la paroisse de Glówno, situés dans le voisinage de Dmosin étaient de la même grandeur. Tous ces villages-hameaux appartenaient à la petite noblesse. Seul le chef-lieu de paroisse était plus grand et comptait souvent de 30 à 40 maisons. Le développement de ces villages-centres locaux de premier rang était spontané. Ils ont souvent la forme de village-rue, les rangs des maisons sont plus serrés et il n'y a aucune trace de régularité dans la disposition des champs.

Par contre, dans la grande propriété terrienne, il y avait des villages plus grands. La paroisse de Złaków Kościelny qui était une partie de la grande propriété avait 7 villages, 39 maisons de moyenne.

La grande propriété foncière formait au XVI<sup>e</sup> siècle des enclaves (voir carte, Fig. 1). L'une des plus grandes était celle de l'évêché de Gniezno, dans la région de Łowicz, qui huit siècles durant, a appartenu au même propriétaire ecclésiastique. Dans ce grand ensemble territorial englobant de 100 à 130 villages il y avait à la fin du XVIII<sup>e</sup> siècle un grand nombre de vastes villages réguliers. Dans ce type de propriété on trouve les formes de villages-rues et de villages à place ovale. La disposition des champs était aussi régulière, adaptée à l'assolement triennal. Les villages de Mszadła et de Złaków Kościelny sont des exemples de villages à place ovale, Złaków Borowy est un village-rue régulier (voir "Report of the excursion" à la fin de ce volume). On peut supposer que les premiers bâtis autour d'une place ovale, sont très anciens et existaient avant la formation de la grande propriété féodale.

Selon les descriptions contenues dans les comptes rendus de lustrations anciens, le village de Mszadła (Fig. 3) était entouré d'une haie. L'entrée du village était protégée par des portes. La porte principale avait 3 mètres de hauteur et était construite avec des poteaux pointus. C'est ainsi que le village se défendait contre les animaux sauvages et les voleurs. Les restes de ces portes existaient encore en 1800 (Wareżak 1952).

Le village à place ovale facilitait la défense et la protection des biens et des animaux domestiques. L'habitat de défense avec une place était bien connu dans notre pays dans de nombreux bourgs (*hill-forts*) aux VI<sup>e</sup>-X<sup>e</sup> siècles. Mais c'est grâce à l'archéologie que l'on pourrait savoir avec certitude si les villages à place ovale sont des vestiges d'un habitat plus ancien.

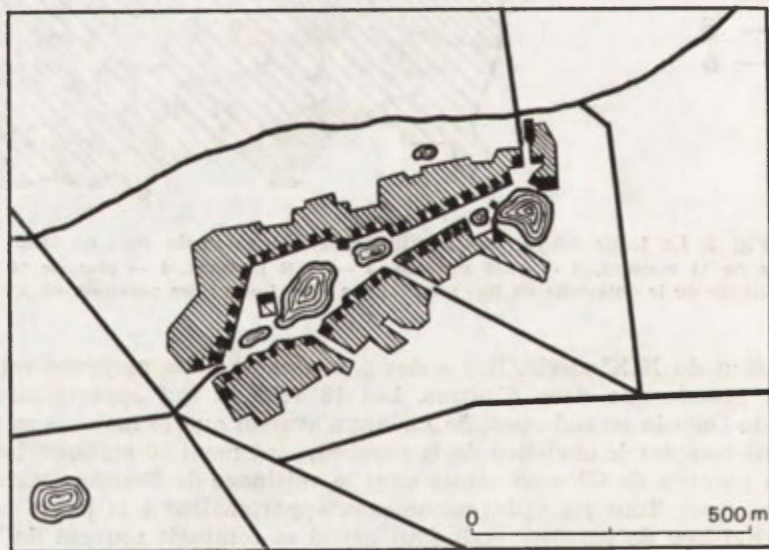


Fig. 3. Le village de Mszadła en 1905 avec une place ovale et quelques étangs au milieu de la place. Ancienne propriété des archevêques de Gniezno, réorganisée en 1361 sur le terrain déjà habité—probablement continuation du village Lyubyn qui disparut. Trois portes défendaient l'entrée au village (d'après J. Wareżak, 1952)



La comparaison de ces villages avec ceux qui ont été ultérieurement créés dans cette région nous permet de confirmer cette hypothèse. Au XIV<sup>e</sup> siècle, l'archevêque Bogoria-Skotnicki a entrepris de grandes réformes agraires dans la grande propriété ecclésiastique autour de Łowicz. Nombre de petites localités a disparu, de nouveaux villages, plus grands, ont été créés. Złaków Borowy en est un exemple typique. Le village était situé au milieu des champs et les habitations étaient bâties le long d'une rue étroite, à distance régulière. Ce type de village-rue régulier existait aussi dans les autres parties de la Mazovie. Nous observons des processus semblables dans la propriété ducale et ensuite royale qui formaient des enclaves dispersées dans toute la région. Ces terrains se distinguent aussi par un plus grand nombre de villages-rues réguliers. Il y a avant tout des villages-rues de type Złaków Borowy, par exemple Królowa Wola, un village régulier et très finement mesuré (Kielczewska-Zaleska 1968). Aux environs de Płock il y a des villages, anciennes propriétés royales, avec des places triangulaires d'où partent des routes dans différentes directions. Dans la plaine de Płock on rencontre souvent des villages composés de deux rangs de

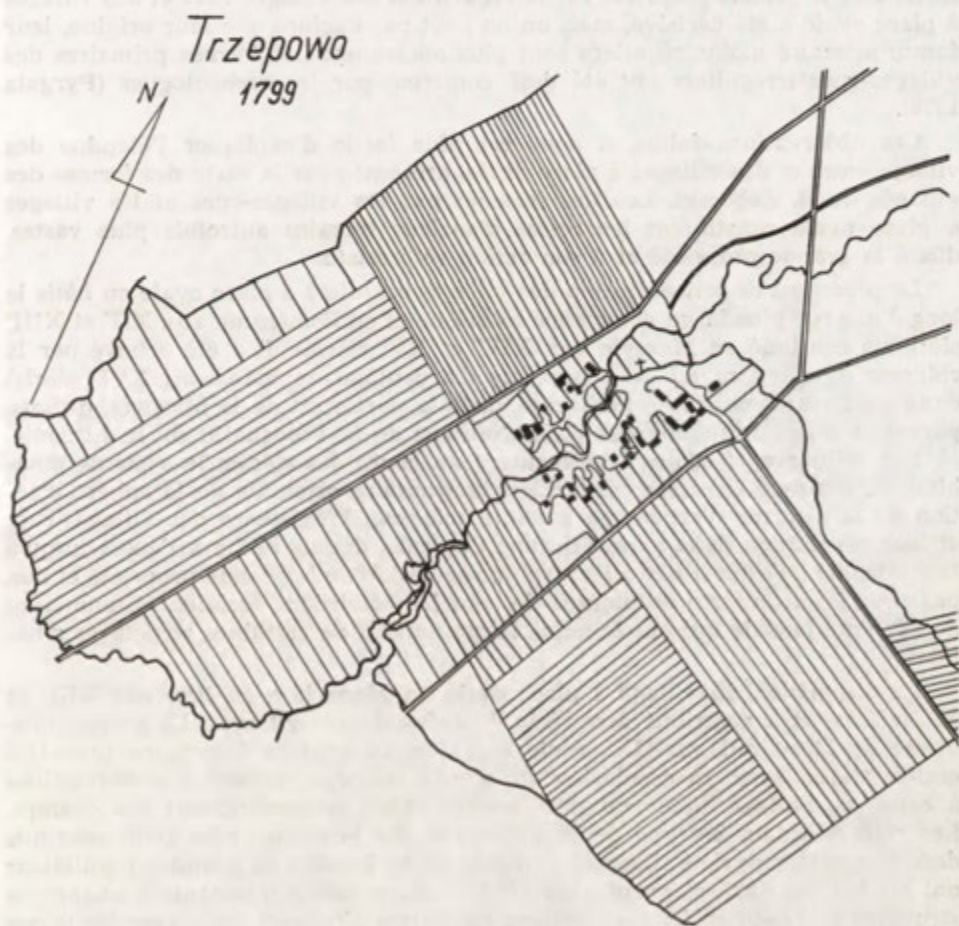


Fig. 4. Trzepowo (distr. Płock) propriété royale, carte de 1799. Les bâtiments sont concentrés le long d'une petite vallée, les champs en trois soles adaptés à l'assolement triennal



fermes, situées des deux côtés d'un ruisseau ou d'une petite vallée. Le centre du village est situé au fond de la vallée (Trzepowo, Fig. 4). On n'observe pas de différence dans la grandeur des fermes d'une côté et de l'autre de la ligne des sites, c'est-à-dire une différenciation sociale dans les villages analysés qui ont été autrefois propriété ducale, royale ou ecclésiastique. Les travailleurs sans terre avaient leurs demeures dans les terrains voisinant avec les fermes paysannes, à l'intérieur de la place centrale. Il y avait d'habitude une ferme plus grande que les autres, appartenant au maire du village ou à l'église (résidence du curé).

Dans le nord de la Mazovie, dans les forêts appartenant au roi, la grande propriété terrienne formait aussi de petites enclaves, et de grands villages réguliers, comme le confirment les études de Piascik datant de 1939 (exemple: le village de Czerwona).

L'existence des villages-rues réguliers et des villages à place ovale, constatée en Mazovie, est sans doute en rapport avec les actions de régulation exécutées par la grande propriété terrienne pour intensifier l'agriculture et augmenter les revenus des villages (Kielczewska-Zaleska 1975). On peut en conclure que l'influence de la grande propriété sur la répartition des villages-rues et des villages à place ovale a été décisive, mais on ne peut pas exclure que leur origine, leur forme primaire moins régulière sont plus anciennes. Les formes primaires des villages-rues irréguliers ont été déjà confirmé par les archéologues (Pyrgała 1976).

Ces observations faites, il nous est plus facile d'expliquer l'étendue des villages-rues et des villages à place ovale, présentée sur la carte des formes des villages de B. Zaborski. Les îles formées par les villages-rues et les villages à place ovale constituent les restes d'anciens terrains autrefois plus vastes, dus à la grande propriété et à son action réformiste.

Le processus de concentration des villages réguliers à place ovale ou bâtis le long d'une rue plus large, commencé en Silésie et en Poméranie aux XII<sup>e</sup> et XIII<sup>e</sup> siècles a continué en Mazovie aux XIV<sup>e</sup> et XV<sup>e</sup> siècles. Il a été achevé par la réforme de *pomiara włóczna* (système d'arpentage en *mansi* au XVI<sup>e</sup> siècle) dans les terrains situés en Podlachie, dans la partie est de la Mazovie, qui appartenait à la République des Deux Nations: de la Pologne et de la Lituanie.

Les influences féodales transformant au cours des siècles le système d'habitat de l'Europe Centrale cessent sur la frontière orientale de la sphère d'action de la réforme d'arpentage *pomiara włóczna*. L'existence des villages-rues et leur répartition dans toute l'Europe Centrale, depuis l'Elbe à l'ouest jusqu'à la Podlachie à l'est, est liée à l'action de régulation de la grande propriété et non pas avec les frontières ethniques. Ce sont les conditions sociales, économiques de l'époque féodale qui ont favorisé l'organisation de certaines structures d'habitat.

La disparition du village à place ovale en Mazovie a eu lieu aux XIX<sup>e</sup> et XX<sup>e</sup> siècles et a contribué à retrécir l'étendue de ces villages. La grande propriété de l'État qui au XIX<sup>e</sup> siècle a également englobé l'ancienne propriété ecclésiastique après sa sécularisation, a subi les plus grandes transformations à cause de l'affranchissement des paysans et du remembrement des champs. Les réformes dans ce type de propriété ont été beaucoup plus profondes que dans la petite propriété. Dans la Principauté de Łowicz de grandes régulations ont eu lieu en 1825 et ensuite en 1889/90. Elles ont complètement changé la structure de l'habitat. La comparaison des cartes plus anciennes avec les cartes plus récentes nous permet de distinguer quelques types de transformations:

1. Liquidation complète de l'ancien site et formation d'un habitat dispersé avec des bâtiments situés près des champs, disposés en lanières. Ce processus

était assez fréquent. On pourrait citer un grand nombre de cas semblables (p.ex. Złaków Borowy).

Les parcellements à la fin du XIX<sup>e</sup> siècle et au XX<sup>e</sup> siècle ont continué et agrandi la transformation des anciens villages.

2. Transformation partielle de l'ancien système, liée d'un côté au maintien de l'ancien centre de village et de l'autre — à la formation de nouveaux sites dispersés. Złaków Kościelny peut servir d'exemple de village où, en dépit des deux régulations et des remembrements effectués au XIX<sup>e</sup> siècle, on voit le contour de la place ovale.

La disparition de l'ancien plan du village (bien que l'ancien centre du village soit gardé), sous l'influence de la reconstruction et du développement de l'urbanisation, est aussi très fréquente.

En conséquence de ces réformes, les villages-rues et les villages à place ovale, qui n'étaient d'ailleurs pas très répandus en Mazovie, disparaissent rapidement. Actuellement, on ne rencontre que quelques vestiges de cet ancien type d'habitat.

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- Tabela miast i wsi osad Królestwa Polskiego z wyrażeniem ich położenia i ludności alfabetycznie ułożona w Biurze Komisyyi Rządowej Spraw Wewnętrznych i Politycy*, Warszawa 1827.
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Wieloletni plan rozwoju państwa jest dokumentem, który określa kierunki i zadania polityki państwa na określony czas. Jest to dokument, który ma charakter ogólny i dotyczy wszystkich dziedzin życia państwa. W tym celu należy przede wszystkim określić cele i zadania państwa na określony czas. Następnie należy określić środki, które będą wykorzystane do osiągnięcia tych celów. Wreszcie należy określić sposób, w jaki będą wykorzystywane te środki. W ten sposób wieloletni plan rozwoju państwa staje się dokumentem, który ma charakter ogólny i dotyczy wszystkich dziedzin życia państwa.

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### WIELOLETNI PLAN

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## RÉGIONS D'HABITAT DE LA MARCHE DE BRANDEBOURG EN TANT QUE RÉSULTAT D'ACTIVITÉS DE LA GRANDE PROPRIÉTÉ FONCIÈRE

ANNELIESE KRENZLIN

Les cartes de finages agricoles provenant du 18<sup>e</sup> et 19<sup>e</sup> siècles qui présentent sous forme graphique les vieilles formes d'habitats paysans dans la province de Brandebourg<sup>1</sup> démontrent que sur ce terrain moyen de la colonisation allemande tendant vers l'est les habitats n'étaient pas fondés — contrairement à ce que l'on supposait maintes fois — dans le cadre d'une colonisation planifiée c.-à-d. toujours d'après le même modèle ou du moins très ressemblant. A vrai dire, ces habitats ont été organisés différemment dans différentes régions.

En grandes lignes, nous pouvons distinguer d'abord 4 régions où la structure d'habitat était la même: le Brandebourg occidental; le Brandebourg moyen, nord-oriental et oriental; le Fläming; la Basse Lusace (Niederlausitz).

Je me borne dans ce rapport aux territoires de la Marche de Brandebourg situés au nord de l'ancienne vallée (*Urstromtal*) du Baruth et à l'ouest de l'Oder et puis je comparerai les structures d'habitats en Marche occidentale et moyenne, tout en les expliquant.

La structure d'habitat sur le territoire de la Marche de Brandebourg occidentale se caractérise par les traits suivants:

(1) Les localités sont de grandeurs très différentes. Les plus petits finages agricoles sont inférieurs aux 250 ha et la surface des plus grands dépasse largement 2000 ha.

(2) Les formes des localités sont très variées. On y trouve les villages-rues moyens et petits, les villages-impasses (*Sackgasse*), les villages circulaires (*Rundling*) et les hameaux (*lockere Weiler*). Quant à la forme des terroirs villageois, on rencontre: les finages divisés le plus souvent en lanières régulières de grandeur moyenne, les finages divisés en lanières de petites dimensions (les 2 formes sans une division régulière en parcelles), les finages en parcelles trapues divisés en lanières (*Blockgewannfluren*), les finages en parcelles trapues (*Blockfluren*).

(3) Il y a un grand nombre de villages abandonnés dans de différentes périodes.

(4) Le régime de manses (*Hufenverfassung*) n'est pas encore totalement réalisé et durant les siècles de la période post-colonisatrice il va subir encore de nombreux changements. Le système dominant est celui de 1 ou 2 manses.

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<sup>1</sup> La carte des formes d'habitats dans la province de Brandebourg paraîtra bientôt.

Et maintenant je passe à l'examen des finages abandonnés, car de cette façon on parvient mieux à comprendre la structure d'habitat et son développement en Marche de Brandebourg occidentale. Je choisis comme exemple le nord de la Prignitz. Sur la carte annexée (Fig. 1) ont été marqués conformément aux cartes de finages agricoles datant du 19<sup>e</sup> siècle :

- les villages avec leurs finages agricoles,
- les noms de champs: *Dorfstellen* et *Wöhrden* d'après lesquels on peut supposer avec une grande probabilité l'existence sur ces lieux d'anciens villages déjà disparus,
- les endroits dans les limites de finages que l'on peut définir avec une pleine certitude, en vertu de formes de leurs parcelles, de leurs noms et de

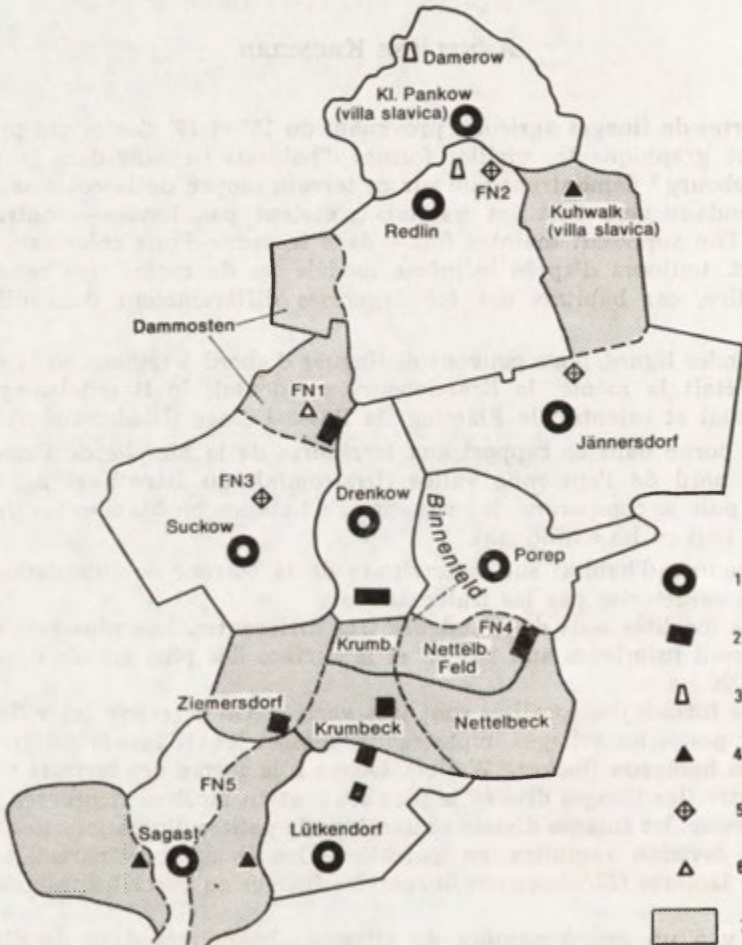


Fig. 1. Finages abandonnés en Prignitz septentrionale

1 — Village existant; 2 — *Dorfstellen*, *Wöhrden* etc. (emplacements de villages); 3 — Habitat slave d'après Matthes. Formes de parcelles et noms de champs; 4 — Emplacements de villages circulaires et tessons céramiques slaves (*wendisch*); 5 — Noms de champs suggérant l'existence d'anciens villages; 6 — Remparts de bourgades; 7 — Surface des finages abandonnés. — FN — Noms de champs indiquant les finages abandonnés: FN1 — *Mooster Wiesen* (prairies), FN2 — *Kessin*, FN3 — *Wendkerkhöfe* et *Aschhöfe* (cimetières slaves), FN4 — *Die freien Ortsstücke* (terrains inoccupés), FN5 — *Borstorffer Kaveln*

fouilles préhistoriques<sup>2</sup>, comme lieux habités dans la période préallemande, — les emplacements de villages (*Dorfstellen*) où le système de parcelles permet encore aujourd'hui de reconnaître l'ancienne forme circulaire de villages disparus,

- les anciens remparts de bourgades,
- la superficie exacte de certains finages abandonnés.

Le Tableau 1 contenant les données les plus importantes pour chaque localité complète la carte.

La carte et le tableau présentent l'état de choses suivant.

Au 18<sup>e</sup> siècle il y avait dans la pointe nord de la Prignitz 8 villages paysans et 2 fermes seigneuriales (*Vorwerke*). Les villages paysans avaient la forme circulaire jusqu'au village Suckow. Le village Klein-Pankow est mentionné en 1391 comme *wendeschen panchow*. Pour la période vers l'année 1400, il faut énumérer 6 autres villages paysans où l'on peut encore aujourd'hui situer leurs habitats et finages. Dans le cas de 3 finages abandonnés, on peut deviner encore la forme circulaire des anciens villages. A part cela, il y avait autrefois 8 villages pour lesquels les documents historiques manquent et dont on ne peut plus établir les finages, mais leur existence antérieure est indiquée par les noms de champs, les fouilles préhistoriques et le système de propriété foncière (*Besitzgefüge*).

Les 14 villages du premier et du second groupe existaient vers 1400 en tant que villages paysans. Durant les quatre siècles suivants, 43% de ce chiffre ont cessé d'exister. Il s'agit donc ici de finages abandonnés pour des raisons structurelles (*Strukturwüstungen*). Ce phénomène doit être incorporé au processus d'apparition de finages abandonnés dans la période du haut moyen-âge. La couche plus ancienne dont les habitats ne peuvent être localisés que grâce aux noms de champs, aux formes de la propriété foncière ou grâce aux reliques préhistoriques — appartient à la période slave tardive. Ce sont les emplacements de petits ou même de très petits villages de 2-4 exploitations agricoles qui se situaient, souvent en groupes, l'une tout près de l'autre et toujours aux bords de vallées.

D'après les reliques retrouvées, le processus de développement d'habitats dans la région de Prignitz se présentait de la façon suivante pour la période de l'époque slave tardive jusqu'au haut moyen-âge. A partir de 1100, une immigration de colons allemands<sup>3</sup> se fait observer, tout d'abord sous forme peu organisée. Après la croisade contre les Wendes en 1147, la chevalerie allemande a pris possession de la Prignitz et le pouvoir politique sur ce territoire est passé définitivement aux mains allemandes. A partir de ce moment, la période de la colonisation intense est arrivée dans cette région. On fonde maintenant de nouveaux villages avec les colons allemands et notamment les petits villages-rues avec le nouveau système de finages agricoles en lanières (*Gewannfluren*). On déplace aussi les anciens habitants slaves dans les nouveaux villages organisés conformément au droit allemand. Dans la période du haut moyen-âge tardive, les habitats, petits dès leur fondement, s'unissent en formant des villages plus grands.

Le modèle de l'habitat de la Prignitz constituait le résultat d'une activité colonisatrice où la transplantation de la population slave dans de nouveaux villages (fondés conformément au droit allemand) jouait le rôle important et

<sup>2</sup> A comparer W. Matthès, *Die Urgeschichte des Kreises Ostprignitz* (La préhistoire du district de la Prignitz orientale), Leipzig 1929; W. Böhm, *Die Vorgeschichte des Kreises Westprignitz* (L'histoire ancienne du district de la Prignitz occidentale), Leipzig 1937.

<sup>3</sup> Voir J. Schultze, *Die Prignitz*, Köln-Graz 1956.



TABLEAU 1. Finages abandonnés en Prignitz septentrionale

Localité	Nombre de manses	Forme du village	Forme du finage	Noms de champs	Fouilles préhistoriques (tessons)	Remarques
Klein-Pankow	1364: 9	ovale	en lanières	"Damerowstücken"	slaves-allemands hâtifs	1391: <i>wendeschen panchow</i>
Redlin		ovale	en lanières	"Dorfstellen" "Kessinstücke"	habitat slave	
Jännersdorf avec Kowalek (villages abandonnés)	1686: 24 1686: 18	ovale (ovale)	en lanières	"Plasten" "Wöhrde"	fondations	1355: <i>in villa coval slavicalis</i> 1552: abandonné
Suckow	1686: 8	petit village-rue	en lanières	"Mooster Wiesen" "Burgwall" "Wendkerkhöfe"		Dammosten abandonné
Drenkow	1686: 6	ovale	en lanières courtes	"Dorfstellen"		
Porep avec Krumbeck	1686: 12	ovale	en lanières courtes			1413: <i>in den twen dorpern tu pureybe</i>
Nettelbeck (villages abandonnés)	1686: 14	"Krumbecker Feld"		"Dorfstelle"		1291: village, 1540: abandonné 1686: 1/2 à Porep, 1/2 siège noble 1540: abandonné 1684: 1/2 à Porep, 1/2 siège noble
		"Nettelbecker Feld"				
Ziemersdorf (village abandonné)	?	?	?	"Dorfstelle"		1387: village, 1552: abandonné, 1752: colonie
Lütkendorf	1686: 25	ovale	en parcelles trapues	"Dorfstellen"	fondations, tessons slaves-allemands hâtifs	
Sagast	1686: 31	ovale	en lanières	"Wörden" "Wöhrde"	tessons slaves-allemands hâtifs	1492: abandonné

se laissait reconnaître jusqu'aux temps modernes. Mais la structure primaire de l'habitat slave préalable sur le plateau de moraines de fond de la Prignitz ne s'est nulle part conservée. Il est possible qu'on puisse encore la détecter à certains endroits dans la vallée de l'Elbe, dans Lutkenheide, à Schadebeuster ou à Klein Wootz (1502 *wendischen wussow*)<sup>4</sup>.

Maintenant, nous devons nous poser la question, combien de temps le processus de la nouvelle colonisation a duré dans la région de la Prignitz ou bien sur le territoire du Brandebourg occidental. J. Schultze nous fait savoir dans son étude sus-mentionnée *Die Prignitz* que ce processus s'est déroulé juste après le milieu du 12<sup>e</sup> siècle. Mais la façon et les modalités de cette colonisation et de ce transfert de la population nous autorisent quand même à supposer une période plus longue. A ce propos, il faut nous attacher au fait qu'une région dans le Mecklembourg sud-occidental, située à proximité de la Prignitz et appelée la *terra Jabel* a été mentionnée en 1230 par le registre de Ratzebourg des redevances de dîmes<sup>5</sup> en tant que *terra slavica*.

Il est donc évident que la colonisation et la nouvelle organisation des habitats slaves n'ont pas encore été achevées en ce moment précis. Il existe aussi certains exemples dans le Brandebourg occidental que ce processus dura jusqu'en 1300 et même quelquefois jusqu'en 1400. Deux exemples de la région de la Havel peuvent servir à démontrer cette thèse.

Les deux habitats sont situés au nord de la Havel entre Potsdam et Brandebourg à la limite des marais de la vallée de la Havel et du plateau diluvien. Nous rencontrons pour la première fois le nom de la localité Paretz en 1197 dans un acte de donation: *Poratz et alterius slavice ville Poratz*<sup>6</sup>. Dans le registre de Brandebourg des villages pour l'année 1375 on lit: *Poretz sunt 32 mansi... cosati sunt 16*<sup>7</sup>. En 1197 il y avait donc conformément à ce document un village allemand Paretz et un autre habitat slave du même nom. Celui-ci était situé au sud de Paretz actuel sur une petite île sableuse de la vallée ce que confirment dans ce lieu de nombreux tessons céramiques de la période slave tardive et le nom *Kirchwerder* attribué à ce terrain<sup>8</sup>.

A l'est de cet habitat slave on a découvert sur un autre îlot sableux *Hinteren Werder*, juste au bord de la Havel, un cimetière slave utilisé pendant la période slave moyenne et tardive. L'habitat slave de Paretz devait donc disparaître plus tard entre 1197 et 1375. Il faut considérer que ses habitants ont été transférés vers 1200 au village allemand Paretz, nouvellement fondé. Cette supposition est confirmée par le registre des villages de 1375 qui dénote un nombre de *cosati* étrangement élevé en comparaison avec le nombre de manses et avec celui de 6 manses exempts de droits de ferme (*zinsfreien Hufen*)<sup>9</sup>.

Le développement du village Weseram nous fournit encore plus de riches détails. Cet habitat, lui aussi, avait au début de la période allemande deux villages du même nom: *ambo Weseram* sont mentionnés en 1335<sup>10</sup>. Dans le

<sup>4</sup> A. F. Riedel, *Codex Diplomaticus Brandenburgensis*, Berlin 1867-1869 (cité dans la suite par "R"), A XXV 104.

<sup>5</sup> *Mecklemburgisches Urkundenbuch* (Le recueil de différents actes de Mecklembourg), I, 375.

<sup>6</sup> R, A VII 469.

<sup>7</sup> *Das Landbuch der Mark Brandenburg von 1375* (Le registre des villages de la Marche de Brandebourg de l'année 1375) édité par J. Schultze, Berlin 1940, v.p. 175 (cité dans la suite par *Landbuch*).

<sup>8</sup> Voir A. Krenzlin, *Deutsche und slawische Siedlungen im inneren Havelland. Ausgrabungen und Funde* (Les habitats allemands et slaves dans la région de la Havel. Fouilles et découvertes), 1956, H. 4, tab. 1.

<sup>9</sup> A. Krenzlin, *op. cit.*, p. 4.

<sup>10</sup> R, A IX 32.

registre des villages de 1375 on n'a noté qu'un seul Weseram avec 25 manses et 8 closeries (*Kossäten*)<sup>11</sup>. C'est justement le Weseram allemand, nouvellement fondé au pied du plateau diluvien. L'autre Weseram mentionné en 1335 existait selon toutes apparences encore à cette époque historique au sud du village allemand sur un petit îlot sableux (*Talsandinsel*) directement sur la Havel, appelé *Altes Dorf* (village ancien). On y a trouvé les tessons céramiques de la période slave tardive et du début de la période allemande<sup>12</sup>.

Dans le registre d'impôts (*Schossregister*) de 1450 Klein Weseram avec 12 manses apparaît à côté de Gross Weseram avec 25 manses, tandis qu'en 1624 il n'y a qu'un seul Weseram avec 37 manses. Il est donc évident que le village slave de Weseram a été réorganisé entre 1375 et 1450 en vertu du droit allemand. Il a été en même temps transféré de la vallée de la Havel vers la pente du plateau diluvien, 300 mètres à peu près à l'ouest de Gross-Weseram. Les deux villages se sont plus tard unis, entre 1450 et 1624. La vieille limite entre deux finages agricoles de ces deux villages se laisse facilement reconnaître dans le système de la propriété foncière. L'intervalle primitivement libre entre les deux villages a été ensuite occupé par les closeries (*Kossätenhöfe*), comme le démontre la carte des finages agricoles du 19<sup>e</sup> siècle.

Ces deux exemples et bien d'autres que l'on pourrait présenter pour toute l'étendue du Brandebourg occidental permettent de constater que le processus de la nouvelle organisation de villages et du transfert de vieilles localités slaves constituait dans la Marche occidentale un phénomène de longue durée et qu'il n'a été définitivement terminé qu'au 14<sup>e</sup> siècle.

A l'est de la ligne Havel-Nuthe, une nouvelle structure d'habitat apparaît sur de vastes étendues de grands villages planifiés (*Plansiedlungen*). Elle se caractérise, contrairement à la grande diversité de formes d'habitat dans la partie occidentale de la Marche de Brandebourg, par l'indentité de toutes ses formes.

Les villages sont grands. Pour la plupart, le nombre de manses dépasse 50 et dans certaines localités il y a même plus de 100 manses. S'il s'agit des formes de villages, c'est le grand village oval (*Angerdorf*) qui prédomine. Parallèlement, il existe aussi la forme du grand village-rue. Dans ces grands villages réguliers, comme formes de finages agricoles prévalent les grands unités à lanières longues avec une division très régulière en manses appartenant aux particuliers (*Grossgewannflur mit einer sehr regelmässigen Verteilung des Hufenbesitzes*).

Dans la Marche moyenne se manifeste la forme de finages agricoles mesurés en manses (*Hufengewannflur*) où la plus grande partie du finage villageois est occupée par trois grands quartiers parcellaires appelés *manses*, partagés eux aussi en autant de lanières qu'il y a de manses notés pour cette localité dans le registre des villages (*Landbuch*) de 1375.

Un autre trait caractéristique pour cette structure d'habitat, c'est le très petit nombre de finages abandonnés pour des raisons de structures (*Strukturwüstungen*), provenant de la période du haut moyen-âge tardive. Il n'y a donc eu ici aucune concentration d'habitat, car les villages ont été fondés grands dès leur début, dans le cadre de la colonisation allemande de l'est.

Il faut souligner enfin que dans toute la région de grands villages planifiés il y a très peu d'indices de l'habitat slave antérieur à la colonisation allemande, d'indices fournis par les noms de champs, par les formes du système de propriété foncière et par les données attestées dans les documents de l'époque.

<sup>11</sup> *Landbuch*, p. 189.

<sup>12</sup> A. Krenzlin, *op. cit.*, tab. 2.



On rencontre les habitats de cette structure sur le territoire de la Marche de Brandebourg à l'est de la ligne de Havel-Nuthe, sur tous les grands plateaux diluviens dans les cas où la vieille structure n'a pas été perturbée par la formation de biens fonciers pendant la période moderne. De quelle façon a-t-on ici, dans le pays de grands villages planifiés pourvus du régime de finages planifiés (*Plangewannflursiedlungen*), incorporé la nouvelle structure de villages à l'ancien système d'habitat slave préallemand?

La carte générale de H. A. Knorr<sup>13</sup> des habitats préhistoriques préallemands ne correspond pas au nombre modeste d'indices basés sur les noms de champs, les formes du système foncier et les données attestées par les documents relatifs à l'existence de la population slave préallemande. Teltow, Barnim et l'Uckermark sud-occidentale ne possèdent presque pas d'habitats jusqu'aux pentes des plateaux diluviens. Mais l'Uckermark nord et est, le Land Lebus et la Neumark comportent un grand nombre d'habitats slaves, attestés pour les temps historiques.

Permettez-moi maintenant d'étudier plus profondément le problème d'habitats de la population slave sur l'exemple du Land Lebus.

Parmi tous les grands villages aux finages planifiés il n'y a sur le plateau de Lebus qu'un seul endroit défini par l'appellation de *Dorfstelle* (emplacement du village). Il n'y a d'autres noms de champs ni d'autres indices qui puissent prouver l'existence d'habitats slaves à l'époque préallemande. Mais, un grand nombre d'habitats slaves, dont l'existence a été confirmée pour la période préhistorique s'oppose à cette constatation.

J. Herrmann a démontré dans son étude<sup>14</sup> que les habitats de l'époque slave tardive se bornaient pour la plupart à la partie est du plateau de Lebus, tandis que la partie ouest n'était pas habitée, mais fortement boisée. C'est dans cette partie ouest que la colonisation allemande tendant vers l'est a concentré ses efforts.

Dans les années 20 du 13<sup>e</sup> siècle, le duc de Silésie Henri Ier, originaire de la dynastie des Piastes, a donné, justement ici, pour les buts de colonisation, plus de 100 manses à chacun des trois couvents silésiens et à l'Ordre des Templiers<sup>15</sup>. On a fondé alors 18 grands villages avec les finages agricoles planifiés, situés dans une plaine isolée à l'ouest du plateau. Ces grands villages, régis par le droit allemand, ont aussi fortement influencé la structure d'habitat de la partie orientale du plateau de Lebus. Ils n'ont laissé aucune trace reconnaissable des localités slaves qui existaient ici dans la période préallemande. La seule survivance, ce sont les nombreux noms slaves de localités, très fréquents dans la partie orientale du plateau.

Conformément à ces constatations, la colonisation allemande devait donc à partir du 1235 s'étendre avec ses villages méthodiquement fondés, de l'ouest vers l'est, jusqu'au bord des marais de l'Oder. La population slave, établie jusqu'alors dans de petits habitats, devait s'intégrer aux nouveaux grands villages, dans les mêmes villages si les colons allemands et slaves s'établissaient ensemble ou bien dans les villages séparés, habités seulement par les colons slaves.

On peut le prouver en vertu d'exemples puisés dans d'autres parties de la Marche moyenne. Wendisch-Mutz, situé à la limite orientale du Land Ruppín

<sup>13</sup> Voir H. A. Knorr, *Die slawische Keramik zwischen Elbe und Oder* (La céramique slave entre l'Elbe et l'Oder), Leipzig 1937, tab. 27; *Die slawischen Siedlungen zwischen Elbe und Oder* (Les habitats slaves entre l'Elbe et l'Oder).

<sup>14</sup> J. Herrmann, *Die Land Lebus und seine Burgen westlich der Oder* (La région de Lebus et ses bourgades à l'ouest de l'Oder), *Varia Archaeologica*, À l'occasion du 70<sup>e</sup> anniversaire de W. Unverzagt, édité par P. Grimm, 1964.

<sup>15</sup> A comparer G. Fischer, *Das Land Lebus*, Frankfurt/Oder 1936, p. 34 et suiv.

est un grand village ovale (*Angerdorf*) avec le finage agricole à lanières longues. Il a été mentionné en 1590 avec 48 manses, 20 propriétaires de manses (*Hüfner*) et 12 closiers (*Kossäten*), donc selon le droit allemand. Dans son finage agricole on trouve les noms de champs tels que *Dorfstättstücke* ou *Schedlitz Stücke* qui indiquent l'emplacement de petits habitats slaves de l'époque préallemande, d'où devaient provenir les habitants slaves du village Wendisch-Mutz, fondé au 13<sup>e</sup> siècle<sup>16</sup>.

Tout près de Wendisch-Mutz qui portait plus tard le nom de Gross-Mutz, se trouvait le village Deutsch-Mutz, situé sur le territoire de l'Uckermark et appelé aujourd'hui Klein-Mutz pour lequel le registre des villages (*Landbuch*) de 1590 indiquait l'existence de 44 manses avec 29 propriétaires de manses (*Hüfner*) et 11 closiers (*Kossäten*)<sup>17</sup>.

Cette intégration de la population slave dans les nouveaux grands villages planifiés, fondés selon le droit allemand, devait se dérouler très vite — en comparaison avec la partie occidentale de la Marche de Brandebourg — et terminer au moment de la fin de la colonisation allemande dans la Marche moyenne.

Il est bien facile de voir la raison de différentes formes de la structure d'habitat dans l'intervalle de temps pendant lequel la colonisation et le transfert de la population slave se déroulaient dans de différentes régions de la Marche de Brandebourg. Il est bien sûr que ce fait ait exercé aussi son influence. Mais avant tout, il faut attribuer la responsabilité de différentes formes régionales de la structure d'habitat aux activités entreprises par la classe des féodaux.

Les grands villages planifiés avec la forme particulière de finages agricoles mesurés en manses et de maisons entourant une place ovale (*Hufengewannflur*, *Angerdorf*) paraissent fréquemment dans la Marche moyenne et doivent avoir été fondés sous une même direction générale qu'il ne faut pas chercher ailleurs que parmi les margraves de Brandebourg et notamment en personnes de Jean Ier et Otton III (1220-1267).

On peut appeler les villages caractérisés par la forme spéciale de finages mesurés en manses (*Hufengewannflursiedlung*) et situés sur le territoire de la Marche de Brandebourg en tant que colonisation planifiée "ascanienne", vu le noms de leurs fondateurs. Ces villages apparaissent fréquemment dans les régions où les Ascaniens exerçaient leurs activités colonisatrices.

A l'ouest de la ligne Havel-Nuthe sur le territoire de la Marche occidentale, l'influence des margraves de Brandebourg était beaucoup plus restreinte. En Prignitz et au Land Ruppín, certaines familles nobles ont agrandi après le milieu du 12<sup>e</sup> siècle les territoires soumis à leur propre pouvoir.

Les seigneurs féodaux n'ont développé aucun schéma unique de colonisation et l'intégration de la population slave n'était pas réalisé parallèlement à la fondation de nouveaux villages selon le droit allemand, comme c'était le cas dans la Marche moyenne et orientale, mais ce processus se déroulait lentement et sous différentes formes.

Aussi dans le midi de la Marche moyenne, au sud du plateau isolé diluvien de Teltow, où la structure d'habitat spécifique pour la Marche occidentale s'est élargie vers l'est jusqu'à la Dahme, il faut attribuer son existence aux activités

<sup>16</sup> *Erbregister des Amtes Zehdenick von 1590 — ehemaliges Geheimes Preussisches Staatsarchiv* (Le registre de successions de l'office de Zehdenick de l'année 1590 — anciennes Archives Secrètes d'Etat de Prusse).

<sup>17</sup> Voir note 16.

des seigneurs féodaux exerçant leur pouvoir sur les petits territoires de Zossen et de Teupitz.

En Havelland et en Zauche qui déjà pendant la première moitié du 12<sup>e</sup> siècle sont passés des mains du duc slave (*Wendenfürst*) Pribislav aux margraves de Brandebourg en tant que propriété allodiale, les margraves ne contribuaient que très peu à l'oeuvre de colonisation. C'étaient surtout l'évêque de Brandebourg et d'autres seigneurs féodaux comme p.ex. les nobles von Jerichow dans le petit territoire de Friesack qui colonisaient le pays.

L'opposition de différents raisons de développement des structures d'habitats dans la Marche de Brandebourg occidentale et dans la partie centrale de la Marche moyenne permet de reconnaître l'influence exercée par les féodaux régionaux et locaux sur la colonisation allemande tendant vers l'est. Elle se manifeste non seulement dans les dimensions et formes de villages, mais dans leur structure intérieure, dans leur structure sociale, dans la forme du droit agraire allemand et aussi dans la façon dont la population slave a été intégrée dans ce processus.

Grâce à cela, on a créé en même temps une base convenable pour le développement ultérieur de phénomènes qui allaient se manifester plus tard sous de différentes formes et dans les limites de différentes structures.

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Institut de la Marche de Bismarck

## PATTERNS IN THE EVOLUTION OF GERMAN GREEN VILLAGES

INGEBORG LEISTER

**ABSTRACT.** The eastward expansion of fully-fledged feudalism obtained its requisite substratum by means of a peasant colonization involving both German immigrants and Slavic residents. This so-called East German Colonization achieved its target by basically one tool, the Hufe, and the Hufen-regime accordingly came to dominate East Elbia more sweepingly than any other part of medieval Germany.

The settlement pattern, composed of mainly linear settlements, street villages, and several variants of green villages, was not fully as uniform as the Hufen-regime would suggest, yet quite distinct from the West German one. The origin of the green village as a primary and planned form of settlement was never in doubt, and doubt was not raised either by its not being a traditional West German settlement form.

Re-assessment was forced upon the author by a point of law, revealed by a Durham source as still binding in mid-17th century and at one time common to many West Germanic laws, namely the legal concept of the Hufe (and toft). Comprising the cultivated land only, arable and meadow, the Hufe was private property and as such non-extendable versus the remainder, usually but incorrectly styled commonage. Yet, depending on the respective siting of tofts in relation to arable, water and wood pasture, it could prove necessary to designate a certain amount of this 'vasta' as common drift way, and only this formed a true village common. The Hufner's toft was invested with a quality in law that strictly required fencing; tofts therefore were grouped, as a rule, and preferably aligned. Besides the Hufners, singled out by their possessing Hufen, rural society knew two groups of non-Hufners, i.e. the cottars and the feudal superstructure.

Street village and green village thus had a linear settlement (*Zeile*) for common ancestor, and this form was traditional (*Reihe*) to West Elbia too. Instead of a primary form of settlement the green village turned out to be due to evolutionary processes of which five can now be distinguished:

1. Notably Thüringia but also part of Lauenburg and Holstein had a Hufe of long standing, and as these Lauenburg districts were now included in the designated colonization area, their old Hufen had to be adapted, usually by means of a *Riemenschlag*. A linear settlement of long standing was thereby transformed in mid-12th century into a green village of sorts; for on the extant drift space proving insufficient to accommodate the augmented number of farmsteads, these were sited along a road as well as on both sides of the irregular green.

2. Cases of late-medieval synoikism were found in all parts of East Elbia but may not have formed a very important group. Two (or more) village territories were joined, one settlement laid waste and its farmers relocated in the perennial one which up to then had been a *Zeile* and was now transformed into

a green village composed of one row of sitting farmers and one row of re-settled farmers. Similarly, a triangular green could, according to V. Müller, be extended by synoikism into a lancet-shaped green village.

3. Social asymmetry. Both cottars and feudal lord being non-Hufners were free to occupy the 'wrong' side of a green. In the case of cottars opposite a Hufner's row settlements which did not gain such a vis-a-vis until early modern times ought to be distinguished from those with medieval cottars. For it is just possible that the second group includes cases of primary green villages IF strict social asymmetry is considered compatible with our definition.

Where a medieval home farm stood opposite a Hufner's row, three variants of development could ensue: (a) the set-up remained basically unaltered right up to the 19th century; (b) the home farm turned demesne farm took over the entire village territory, the Hufners being re-settled on vacant farms in neighbouring villages during the late-medieval period; (c) the home farm was dissolved in favour of new tenants. Dissolution went hand in hand with a redistribution of Hufen-land, so that both old and new 'Hufners' shared in Hufen-land as well as demesne land and had a free run on asserting either individually or communally.

4. The colonization Hufe. German settlers had been lured into braving the unknown by the promise of a double-size Hufe at low rent. However, having regard to tithes and taxes, registers with a taxation bearing render a settlement's size per number of normal Hufen. Indeed, except in mountainous areas (*Waldhufe*) a colonist did receive two normal Hufen rather than one double-sized one.

This, in turn, facilitated a process which helped the landlord to double his, normally low, rent income: the primary Hufen were halved between old and new Hufners, both were then recompensed in newly cleared woodland so that area-wise the old Hufners did not suffer. In law, however, this reform which amounted to the Hufen-regime's overthrow was never recognized and resulted in a muddle. The doubling of tenant numbers did not necessarily produce a green village; where it did, farmers seemingly of equal rank occupied both sides of the green, yet tofts on the younger side were often of a low quality and gave it away as the lesser side.

5. The pseudo-green village, first observed by August in the Niederlausitz and instanced in Lauenburg by Gross Berkenthin. Composed of two *Zeilen* occupied by farmers, the pseudo-green village differed from all the variants dealt with so far by each *Zeile* having a wholly separate territory of its own. The factor(s) causing this pattern must have been distinct too; circumstantial evidence tentatively suggests the pseudo-green village to have originated as a settlement asymmetric ethnically.

East Elbia did not escape the winds of change that blew during the Middle Ages. Its villages were no more static than the West Elbian ones and village territories were not created in one go. The green village was medieval in origin, yet with the possible exception of the pseudo-green village which may have been the outcome of a primary planning process, it had several origins both as regards date and mechanism. These mechanisms, however, had one element in common, namely the Hufe, which by its legal implications did not lend itself to any form of composite settlement. The Hufe proved its worth for establishing the new regime on a sound balance between the farming substratum and the feudal superstructure, and the story of the green village was mainly one of this balance being changed in one way or the other.



## LA STRUCTURE DE LA PROPRIÉTÉ FONCIÈRE AUX ALENTOURS DE VARSOVIE (SUR L'EXEMPLE DE LA FORMATION DU DOMAINE DE WILANÓW)

JANINA LESKIEWICZOWA, BARBARA SMOLEŃSKA

L'influence de la ville sur la formation structurelle de la propriété foncière dans ses plus proches alentours constitue un phénomène général, étudié souvent par les historiens ainsi que par les géographes. Un nouvel aspect de ce problème nous intéresse dans ce rapport, notamment l'influence de Varsovie en tant que capitale sur la formation et le développement à son arrière-plan aux XVII<sup>e</sup>-XIX<sup>e</sup> siècles de la grande propriété foncière. Nous ferons de notre mieux pour présenter cette question en nous servant de l'exemple choisi du domaine de Wilanów.

Wilanów doit son grand développement à la proximité immédiate de la capitale. Grâce à elle, la propriété d'un petit gentilhomme ne possédant au XVI<sup>e</sup> siècle qu'un seul village est devenue résidence royale au XVII<sup>e</sup> siècle et actuellement sert à accueillir dans ses murs les représentants des plus grandes puissances mondiales.

Avant de passer aux problèmes spécifiques de la Mazovie, il paraît utile de mettre en relief les traits caractéristiques de la structure foncière et de ses transformations communes pour toute la Couronne de Pologne. Elles exprimaient le système des forces sociales de l'époque qui limitaient en certain sens le caractère et l'envergure des transactions foncières.

L'état général de la propriété foncière, fixé en gros déjà au début du XVI<sup>e</sup> siècle, a survécu presque sans modification 300 années. Le partage des terres effectué au moyen-âge parmi les classes privilégiés: le roi et le fisc de la couronne, le clergé, la noblesse et les villes s'est avéré très durable dans ses traits essentiels.

Le domaine royal était particulièrement stable. Il constituait pour l'époque moderne conformément aux calculs plus récents 30 à 35% de toutes les terres de la Couronne de la Pologne, sans compter celles de l'Ukraine et de la Volhynie. Les lois de la seconde moitié du XV<sup>e</sup> siècle soutenaient le principe de non-retranchement du domaine royal qui constituait la source principale des revenus d'État.

Les possessions de l'Église se présentaient d'une façon un peu différente. Le corps fondamental de ses réserves s'était formé déjà au moyen-âge. Abstraction faite des transactions effectuées parmi les institutions ecclésiastiques, on peut constater que certaines de ses grandes propriétés foncières n'avaient presque pas changé leur étendue territoriale.

Mais malgré les lois de la 1<sup>ère</sup> moitié du XVII<sup>e</sup> siècle qui interdisaient formellement à la noblesse de se défaire de ses biens en faveur du clergé, les domaines de celui-ci augmentaient nettement. A côté de certains aggrandissements

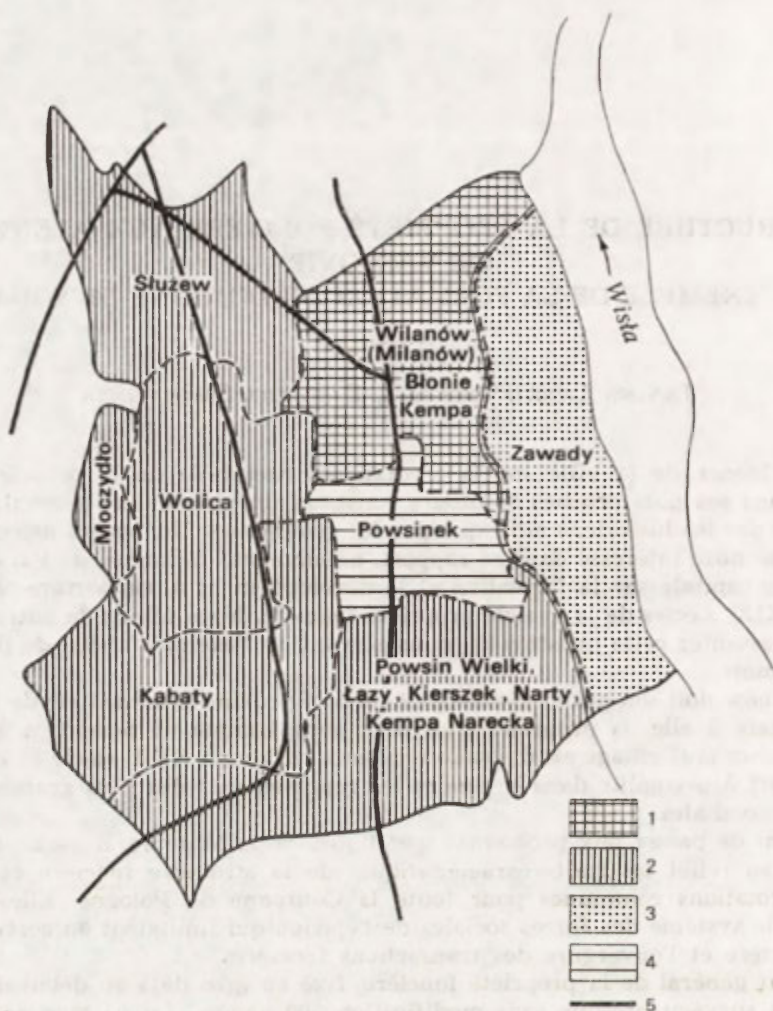


Fig. 1. Types de propriété foncière sur le territoire du domaine ultérieur de Wilanów (moitié du XVIIe s.)

1 — Propriété de magnats, 2 — propriété de la noblesse "en fractions", 3 — propriété ecclésiastique, 4 — propriété de la noblesse moyenne, 5 — chemins

des biens déjà existants, les nouvelles fondations et dotations étaient apparues surtout pour les couvents récemment établis. Les biens ecclésiastiques ont donc augmenté un peu du XVI<sup>e</sup> au XVII<sup>e</sup> siècles au détriment de la noblesse qui transférait ses terres au clergé sous forme de donation ou de vente (les deux formes exigeant l'approbation de la Diète).

La part du clergé dans la propriété foncière toute entière était toujours moindre de celle du domaine royal (+ 17% de la terre) mais comme celui-ci elle était très différenciée selon les régions.

Le processus de déchéance de la propriété foncière ecclésiastique n'a commencé qu'avec la cassation de l'ordre des jésuites (1773).

Le droit exclusif de la noblesse de posséder les biens fonciers est la raison pour laquelle la propriété foncière bourgeoise, si fréquente en Europe occi-



dentale, n'a presque pas existé en Pologne. Certes, il existait d'importantes villes royales et ecclésiastiques qui possédaient certains villages situés dans leurs plus proches environs. Mais la possession des terres en dehors des villes, par les riches bourgeois, était en général rare et limitée aux régions de Poméranie et de Prusse.

Les transactions foncières n'avaient donc pratiquement lieu que parmi les représentants de la noblesse qui possédaient à peu près 50% de toute la terre. Une grande différenciation financière parmi les nobles favorisait ce phénomène. D'après les calculs détaillés pour la Petite Pologne, l'écart entre les fortunes atteignait au XVI<sup>e</sup> siècle le rapport de 1 à 7000. La situation sociale et politique des gentilshommes était aussi très différenciée malgré le principe de l'égalité au sein de la noblesse.

Laissant de côté la noblesse dépourvue de terres, parmi les propriétaires de biens la catégorie la moins aisée était celle des gentilshommes "de closerie" qui exploitaient eux-mêmes sans paysans corvéables leurs petites parcelles de terre. La catégorie suivante caractérisait ceux qui possédaient une "fraction" de village, ou des fractions dans des villages particuliers. Cette noblesse était dispersée sur tout le territoire de la Pologne mais elle était la plus nombreuse en Mazovie et en Podlachie. La noblesse "moyenne" possédait en général de 1 à 5, et même parfois à 10 villages. Le critère de "village", souvent ici employé, est très peu précis. Dans la mesure des possibilités de sources documentaires on analyse aussi d'autres indices, tel que p. ex. le nombre de manses et le niveau d'impôts.

Et enfin, les riches, les grands nobles dont l'élite était appelée: "magnats". Les biens fonciers, des princes Lubomirski, une des premières familles polonaises peut servir à illustrer l'importance de leurs fortunes. Le domaine qui en partant d'un noyau en Petite Pologne s'était élargi sur les voïévodies sud-est comportait finalement 316 villages et 18 villes en 1642. C'est de la Petite Pologne, centre du pouvoir d'État de l'époque, qu'a débuté vers la fin du XV<sup>e</sup> et au début du XVI<sup>e</sup> siècles la course des familles de la riche noblesse aux grandes fortunes de magnats. La Mazovie restait au commencement à l'écart des courants qui menaient à la concentration des terres dans les mains de magnats. La petite noblesse y était particulièrement nombreuse et constituait un pourcentage important de la population (27% à la fin du XVI<sup>e</sup> siècle). Le processus de morcellement des terres était en Mazovie très avancé. L'état des possessions des familles de petite noblesse changeait continuellement à cause de différentes raisons (p.ex. à cause des facteurs démographiques). Mais, le processus continu de morcellement des terres était parfois accompagné de faibles essais d'agrandissement des biens possédés.

Différemment et d'une façon spécifique se déroulait le développement des rapports de propriété pour la noblesse qui habitait les environs les plus proches de la capitale (les terres de Varsovie et de Czersk). Déjà au XVI<sup>e</sup> siècle les tendances d'accumulation des biens étaient assez fortes sur ce territoire et la propriété de la noblesse "de closerie" n'était pas importante et disparaissait peu à peu. La propriété de la noblesse "à fractions" y dominait.

A partir du XVI<sup>e</sup> et du XVII<sup>e</sup> siècles, des modifications caractéristiques sont intervenues dans les rapports de la propriété foncière, dues à la proximité de Varsovie en tant qu'organisme urbain très actif et à partir de l'année 1611 nouvelle capitale de Pologne, centre des activités politiques. Cette fonction a attiré par une force irrésistible les magnats polonais dans les environs de Varsovie. Les magnats de toutes les provinces de la Couronne, et même de la Lithuanie dont le rôle politique devenait de plus en plus important, s'efforçaient d'acquérir de magnifiques résidences à Varsovie ou dans ses plus proches en-



virons et à créer une base économique convenable sous forme d'un ensemble de biens fonciers.

La formation de cette propriété de magnats dans la banlieue se passait généralement de la même manière, c.-à-d. par le rachat de la petite propriété foncière des mains de la noblesse "de closerie", mais aussi de celle de la sous-mentionnée noblesse "à fractions" qui était économiquement beaucoup plus forte. Ce processus a commencé dans la 1ère moitié du XVII<sup>e</sup> siècle.

La stricte coïncidence des dates de construction des palais de magnats et du fondement des enclaves juridiques à Varsovie, ainsi que celle d'achat des biens fonciers aux environs de Varsovie par les mêmes familles — prouve suffisamment que les biens fonciers des magnats dans la banlieue de Varsovie étaient considérés comme base économique de leurs résidences varsoviennes.

On peut observer aussi une nette intensification de telles activités des magnats au cours de la seconde moitié du XVII<sup>e</sup> siècle et au début du XVIII<sup>e</sup> siècle. Dans cette période-là, non seulement les vieilles familles de magnats (comme celles de Lubomirski ou des Branicki) acquièrent des biens aux environs de Varsovie, mais aussi les nouveaux magnats de l'époque dite "de Sax" (les Załuski, les Bieliński, les Przebendowski etc.) qui voulaient approcher Varsovie et la cour royale.

En exploitant les difficultés financières et celles des partages des successions qui pesaient lourd sur les propriétés foncières de la petite noblesse ("à fractions" ou "de closerie"), les magnats acquièrent les biens appartenant à quelques, ou à plusieurs ou même à des dizaines de gentilshommes pauvres (p.ex. la primat de Pologne Andrzej Leszczyński a réuni de cette façon les biens d'au moins 25 propriétaires).

Nous manquons d'analyses détaillées qui permettraient d'illustrer avec les chiffres le développement structural de la propriété foncière de la noblesse en Mazovie et notamment aux environs de Varsovie entre les XVI<sup>e</sup> et XVIII<sup>e</sup> siècles. Une analyse partielle de ces problèmes sur le territoire de quelques paroisses les plus proches de Varsovie a permis de constater que dans quelques unes où la propriété de la noblesse était très morcellée (p.ex. Służewiec ou Raszyn) celle de la petite noblesse ("à fractions" ou "de closerie") avait complètement disparu au cours du XVII<sup>e</sup> siècle en faveur des domaines de magnats.

Mais les ensembles fonciers de magnats aux environs de Varsovie, fondés plutôt pour des buts politiques qu'économiques à la marge de leurs *latyfundia* proprement dits, n'étaient pas durables. Ils changeaient souvent de propriétaire, passaient d'une famille de magnats à l'autre et se démembraient facilement.

Le domaine de Wilanów donne l'exemple-type de la formation d'une grande propriété foncière aux environs de Varsovie, servant de base à la résidence en ville. Ce domaine au temps de son apogée dans la moitié du XIX<sup>e</sup> siècle possédait 14 692 ha — 23 villages et 31 colonies. Le processus de formation des biens de Wilanów a été analysé à l'aide des matériaux déposés aux Archives Économiques de Wilanów (Archives Centrales de Documents Anciens à Varsovie).

Le point de départ pour cette grande propriété foncière a été donné en 1677 par le roi Jean III Sobieski, dont les biens de famille se trouvaient dans les provinces ruthiennes par l'achat du village Wilanów, situé tout près de Varsovie. Wilanów appelé d'abord Milanów appartenait au XVI<sup>e</sup> siècle à une famille de petite noblesse très ramifiée dans cette région (Milanowski), au milieu du XVII<sup>e</sup> siècle il entra avec deux villages voisins dans l'ensemble d'une propriété plus grande.

Après avoir acheté le village, le roi Sobieski a commencé la construction de sa résidence d'été laquelle depuis cette date s'appelle Wilanów (*villa nova*).

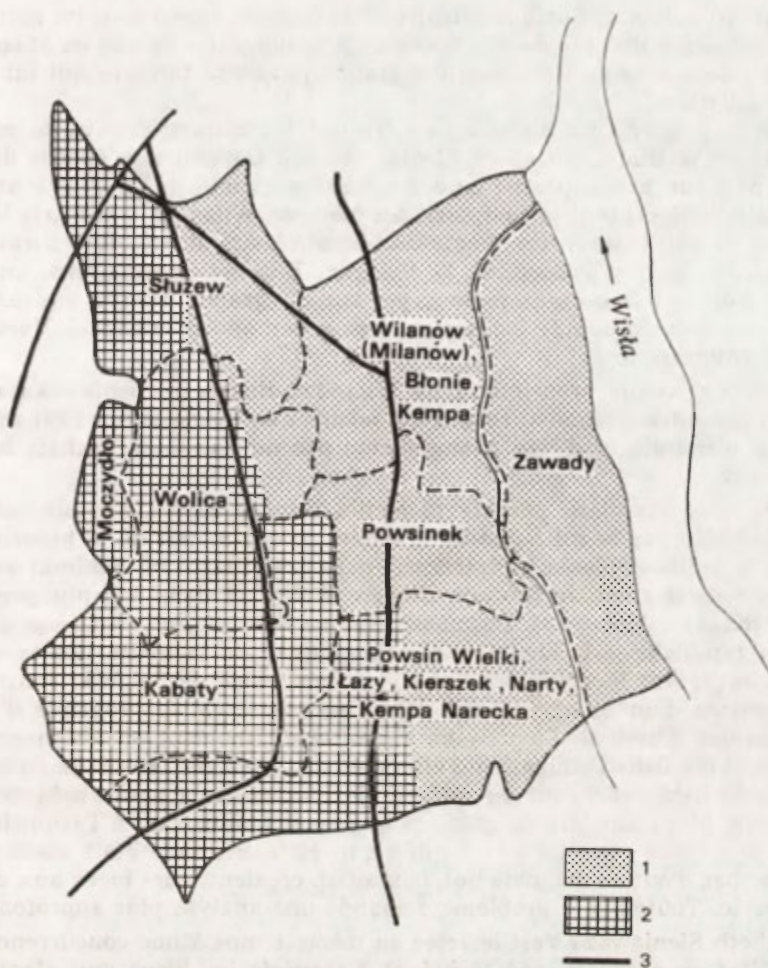


Fig. 2. Transformations des structures de propriété foncière sur le territoire du domaine ultérieur de Wilanów — acquisitions de magnats

1 — Acquisition de Jean III Sobieski (1677-1691), 2 — acquisition d'Elisabeth Sieniawska (1720-1725), 3 — chemins

Entreprise en plusieurs étapes dans les années 1677-1696, elle a transformé une gentilhommière modeste en une résidence vraiment royale. Elle exigeait sans aucun doute une base économique beaucoup plus importante que les trois villages achetés (9,25 manses "laneus"). Ainsi donc, parallèlement à la construction du palais, le roi Sobieski continua durant tout son règne une action conséquente d'achat des biens fonciers voisins de Wilanów. Les propriétaires en étaient très différents: le clergé (le village Zawady), la noblesse "moyenne" (Powsinek des Prażmowski), mais en majorité c'était la propriété de la noblesse "à fractions" (les villages de Powisin, Służew, Wola Służewska). Parmi les membres de la noblesse "à fractions" on trouvait des représentants de familles jadis (XVI<sup>e</sup> siècle) aisées et jouissant d'une importante situation sociale, mais à cette époque déjà trop ramifiées et appauvries (les Ciołek). En somme, pendant les années 1677-1691, le roi Sobieski a conclu 11 achats de biens fonciers,



contenant en moyenne quelques "manses" chacun, et a créé de cette manière un complexe foncier de plus de 30 "manses" (12 villages) — ce qui en Mazovie représentait déjà sans aucun doute une grande propriété foncière qui lui a coûté environ 200 000 zł.

Après la mort du roi Sobieski, ses fils ont lourdement endetté le complexe des biens de Wilanów. Elisabeth Sieniawska née Lubomirska, épouse du grand *hetman* de Couronne, a profité de cette occasion et le 3 juillet 1720 a acheté de Constantin Sobieski tout le complexe des biens de Wilanów, y compris le palais. Bien que le *latifundium* des Sieniawski-Lubomirski ait été situé surtout dans les provinces sud et sud-est de la Pologne, Elisabeth Sieniawska, en jouant un rôle politique important surtout pendant la grande guerre septentrionale, aspirait néanmoins, depuis longtemps à posséder une résidence à Varsovie ou dans ses environs.

Une fois devenue propriétaire de Wilanów, Elisabeth Sieniawska a entrepris les agrandissements successifs du palais et en même temps s'est mise avec beaucoup d'énergie et d'élan à augmenter par de nouveaux rachats les biens de Wilanów.

Pendant la première période (dans les années 1720–1725) elle continuait l'oeuvre initiée par le roi Sobieski et acheta ce qui restait de la propriété foncière de la petite noblesse "à fractions" dans les villages où Sobieski avait fait ses premières acquisitions (Powsin, Służew, Wolica) et dans leur plus proche entourage (Kabaty, Moczydło). De même, comme Sobieski, elle a tiré profit de la situation familiale et financière, très compliquée de la petite noblesse. Ainsi, p.ex. en acquérant Moczydło et Kabaty qui au temps de Sobieski constituaient les propriétés d'un village (c.-à-d. la village entier était propriété d'un seul gentilhomme), Elisabeth Sieniawska a profité du moment où les propriétaires se sont trouvés dans l'obligation d'effectuer des partages familiaux compliqués. Sa méthode habituelle était de racheter les dettes de la petite noblesse ou de prendre ses biens fonciers en gage, ce qui menait tout droit à l'acquisition définitive des biens convoités. Il semble que cette méthode était assez souvent employée par d'autres magnats qui, eux aussi, créaient leurs biens aux environs de Varsovie. Toutefois le problème demande une analyse plus approfondie.

Elisabeth Sieniawska s'est heurtée en même temps à une concurrence d'autres familles de magnats, qui tâchaient d'acquérir les biens aux alentours de Varsovie (p.ex. les Załuski, les Lubomirski). Ce fait témoigne nettement l'intensité d'attraction qu'exerçait Varsovie en tant que capitale sur les magnats.

Plus tard (1726–1727), Elisabeth Sieniawska a tourné ses efforts vers les terres de la rive droite de la Vistule, situées un peu plus loin de Wilanów (Zastów) et qui constituaient déjà depuis longtemps des propriétés appartenant à différentes familles de magnats. Elle les acquit en profitant aussi de leur endettement et de la situation financière compliquée de leurs derniers propriétaires (les Bieliński). En résultat, dans un temps très court (1720–1725), Elisabeth Sieniawska a créé un complexe foncier (de 20 villages à peu près) qui s'est montré exceptionnellement durable et capable d'un grand essor.

En suivant l'oeuvre d'accumulation des biens de Jean Sobieski ou d'Elisabeth Sieniawska, on peut observer que la formation de la grande propriété foncière des magnats au détriment de la petite noblesse avançait dans certaines conditions en deux étapes. D'abord les essais d'accumulation des biens étaient entrepris par les représentants les plus actifs de la petite ou moyenne noblesse (p.ex. les Dąbrowski, les Grzybowski) ce qui leur demandait un très grand effort financier et les forçait ensuite à la vente des biens déjà accumulés. Les magnats profitaient de cet état de choses et à la seconde étape ils rache-



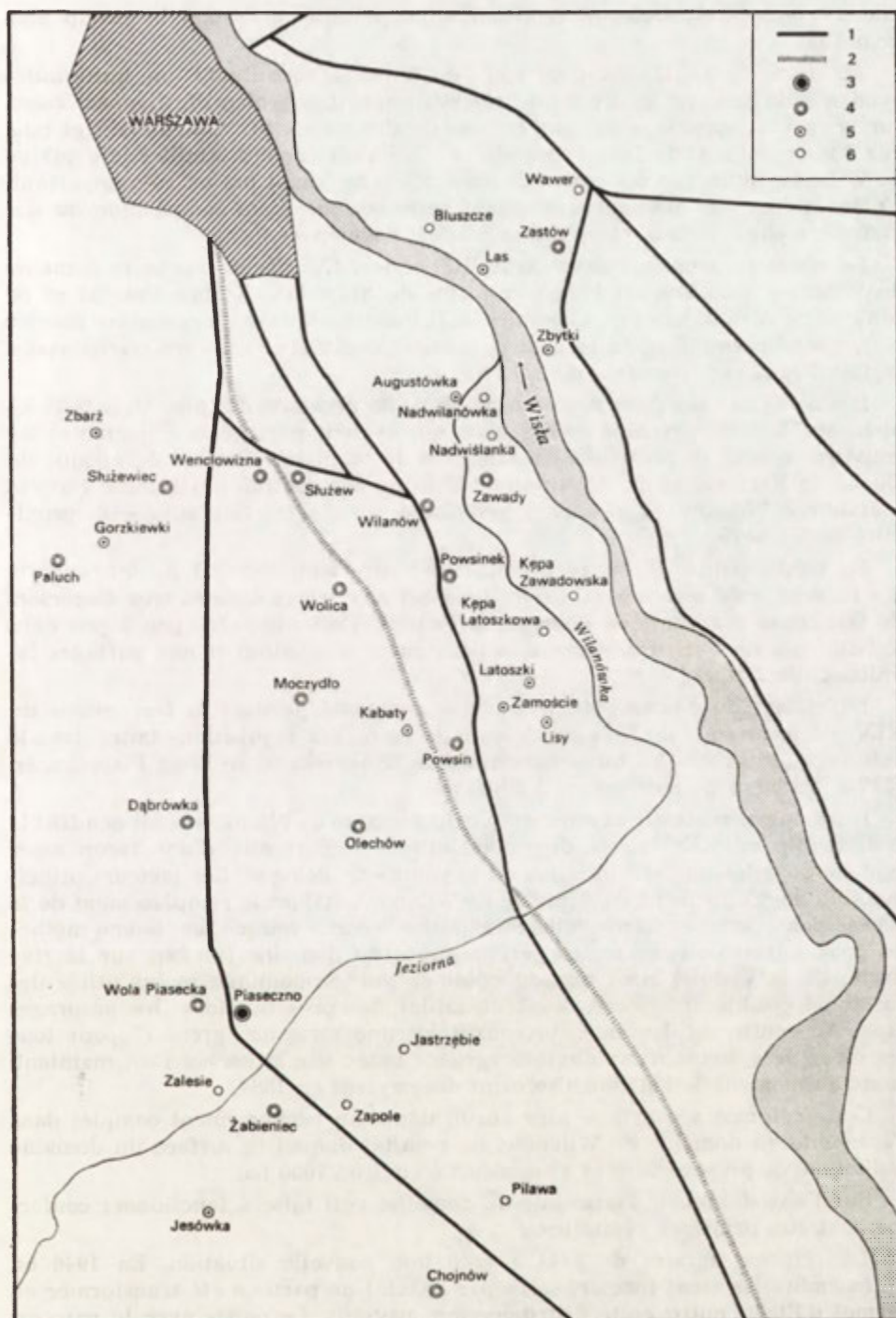


Fig. 3. Carte schématique des biens foncières de Wilanów en 1860  
 1 — Chemins, 2 — escarpe de la Vistule, 3 — villes, 4 — réserves seigneuriales, 5 — villages,  
 6 — colonies

taient ces biens en jouissant de la situation devenue pour eux beaucoup plus favorable.

Au cours du XVIII<sup>e</sup> siècle les biens de Wilanów constituant une unité indépendante de production (avec une réserve seigneuriale bien développée) basée sur la corvée, appartenaient par la voie de succession aux Czartoryski et puis aux Lubomirski. Mais dans l'ensemble de *latifundia* de ces familles le domaine de Wilanów situé loin du centre de leurs biens ne jouait pas de rôle important, n'étant qu'une des résidences. Pendant cette période ni la composition du domaine n'a changé, ni la colonisation ne s'est développée.

La situation a changé entre le XVIII<sup>e</sup> et le XIX<sup>e</sup> siècles quand le domaine de Wilanów est passé en 1799 aux mains de Stanisław Kostka Potocki et de son épouse Aleksandra née Lubomirska. Il constituait déjà un complexe foncier assez grand parmi d'autres biens mazoviens et englobait 9 réserves seigneuriales et 19 villages sur la surface de 8912 ha.

Les modifications de la situation politique (la nécessité de concentrer tous les biens sur le territoire de l'un des états qui avaient partagé la Pologne) et les activités sociales et politiques très animées de Stanisław Potocki à l'époque du Duché de Varsovie et du Royaume de Pologne ont contraint la famille Potocki à établir à Wilanów sa résidence principale, vu — cette fois aussi — la proximité de Varsovie.

En même temps, Wilanów est devenu centre administratif du *latifundium* des Potocki, créé récemment. Ce *latifundium* aux terres d'abord très dispersées (la Galicie, le Royaume de Pologne, la Podolie) s'est concentré peu à peu dans les environs de Varsovie, grâce à la politique d'acquisition et aux partages familiaux des Potocki.

La surface du domaine de Wilanów a augmenté pendant la 1<sup>ère</sup> moitié du XIX<sup>e</sup> siècle presque de 50% par la voie de nouvelles acquisitions faites dans le voisinage (en 1819 — les biens nationaux de Dąbrówka et de Wola Piasecka. en 1857 — les biens de particuliers à Służewiec).

L'organisation sociale et économique du domaine de Wilanów subit pendant la 1<sup>ère</sup> moitié du XIX<sup>e</sup> siècle des modifications importantes d'une façon assez typique pour les rapports agraires du Royaume de Pologne. Les facteurs principaux du développement du domaine de Wilanów, étaient le remplacement de la corvée par le cens, et la nouvelle colonisation, conçus comme une bonne méthode pour faire-valoir les terres périphériques du domaine (surtout sur la rive droite de la Vistule) aussi que du point de vue économique moins utiles (les forêts de qualité inférieure, les broussailles, les prés humides, les pâturages etc.). Au centre du domaine qui constituait une sorte de "grenier" pour tous les biens, le système d'exploitation agricole basée sur la corvée s'est maintenu jusqu'au moment de l'affranchissement des paysans en 1864.

Cette réforme a constitué sans aucun doute un renversement complet dans l'économie du domaine de Wilanów, en résultat duquel la surface du domaine a diminué de presque 50% et s'est réduit à environ 7000 ha.

Sur l'aire diminuée, l'économie du domaine s'est mise à fonctionner conformément aux principes capitalistes.

La réforme agraire de 1944 a créé une nouvelle situation. En 1946 on a démembré les biens fonciers saisis par l'État. Une partie a été transformée en fermes d'État, l'autre a été distribuée aux paysans. Le palais avec le parc est devenu unité administrative à part, dépendante du Musée National à Varsovie.

Varsovie en tant que capitale en XVII<sup>e</sup> et XVIII<sup>e</sup> siècles a influencé la structure de la propriété foncière dans ses environs; les changements menaient

à la concentration des terres dans les mains de magnats. On peut observer jusqu'à présent les traces de ce processus dans les résidences, les palais et les châteaux.

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## THE CRISIS OF RURAL SETTLEMENT AND FARMING IN THE HIGH MOUNTAIN REGION OF CONTINENTAL EUROPE

ELISABETH LICHTENBERGER

Depopulation, abandonment of settlements and extensification of land use are among the features common to most of the high mountain regions of Europe. The following model may serve as a general framework for the discussion of the topic:

Constants	Internal Variables	External Variables
1. Types of relief	1. "Storeys" of agriculture and economic goals	1. Political and administrative structures and measures of agrarian policy
2. Ecological potential	2. Social systems	2. Economic competition within agriculture and/or disparities with other economic activities
	3. Technical and social infrastructure	3. Town — country interrelationships, especially the problem of investments

At first some remarks about the physical constants. The landscapes with favourable natural conditions cover quite small areas. The following may be distinguished:

(1) remnants of peneplains removed to high altitudes by tertiary uplifts, sometimes allowing permanent settlement, but mainly suited for alpine pasture economy;

(2) high glacier-shaped valleys, especially in the Alps and in the Pyrenees;

(3) high basins and poljes, especially in the Appenines and the Dinaric Mountains.

The areas with steep rough slopes unfavourable for mountain farming are, however, predominant above all in the limestone regions, where soil erosion is a permanent danger for cultivation.

According to the geosynclinal formation of the high mountainous regions, they represent the reverse sides of the tertiary orogens, therefore the southern sections of the Pyrenees, Alps and Dinaric Mountains and the eastern part of the Appenines have an extremely steep topography and very poor accessibility. They can be qualified as regression zones *par excellence*.

The differences as to morphological conditions between the north and the south are accentuated by the location of settlements in relation to the zones of natural vegetation. A profile from north to south through the Alps may serve to prove this. Submediterranean plants cover the lower ranges above the northern Italian plain and progress northwards into the Alpine valleys; there-

fore submediterranean agriculture is pushing the zone of mountain farming to a high level. Hence it follows that often an even more precarious existence is entailed than that to be found on the northern versant of the Alps (Fig. 1).

On the other side, we can observe that this marginal zone of submediterranean agriculture mentioned above, characterized by *cultura mixta*, vine and fruit trees on carefully maintained stone terraces, could not compete with the improved agriculture in the foreland. It is both fascinating and discouraging to view the huge areas with abandoned terraces and settlements covering the southern flanks of the Pyrenees, the French Central Massif, the Alps and the Dinaric Mountains.

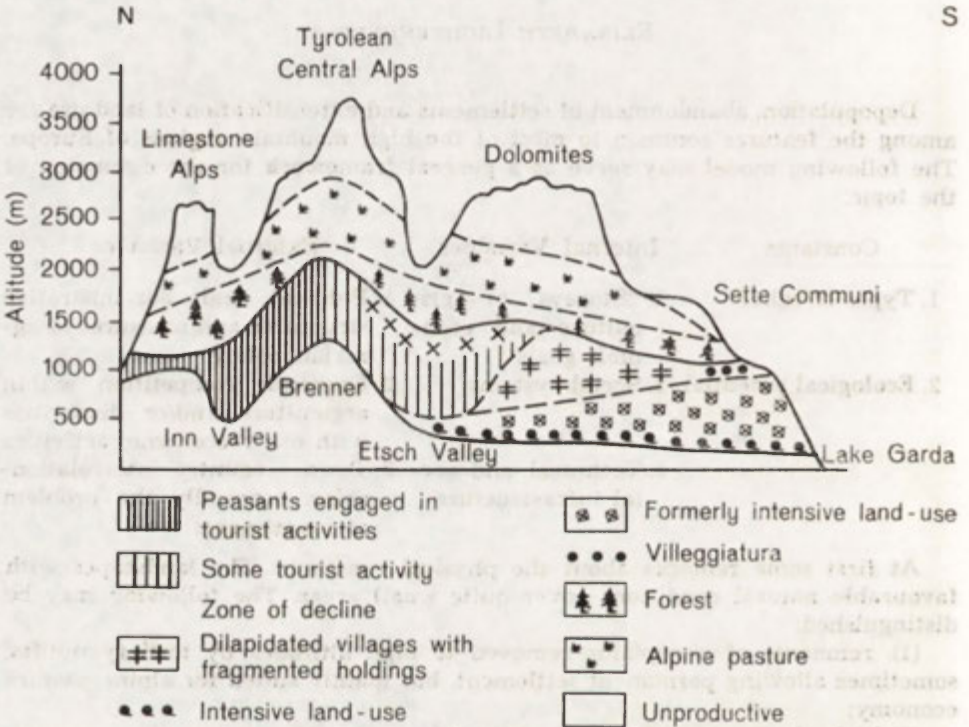


Fig. 1. Schematic profile through the Alps from north to south

The traditional style of mountain farming, based upon self-sufficiency, pushed crop-farming (wheat, rye, maize) up to its utmost climatic limits. In most areas a type of ley farming, rotation comprising crops and fallow (pasture, heather), was quite common. Up to the threshold of World War II genuine grassland economy around the permanent settlements was of no importance, with the exception of some districts on the northern flanks of the Alps (Vorarlberg), some high level areas of the Swiss Alps (Valaisan settlements) and the Dinaric Mountains above the zone of maize cultivation. As from the end of the 19th century, at a slow rate at first and accentuated only since World War II, the importance of grassland economy increased. As far as it constitutes a tendency towards a more intensive cultivation of meadows, this development is to be approved of, but due to the difficulties as to mechanization and a lack of labour, it unfortunately brought about an extensive pastoral economy. The



consequences cannot be overlooked. At a gradient of 20-25 degrees small furrows (parallel to the contours) start forming, when cattle graze on the slopes. In this way the turf is broken and soil erosion sets in. Steeper ground cannot be used for pasture purposes. Therefore former meadows turn into wasteland or have to be afforested.

The growing importance of grassland economy accentuates the fact that the high mountains always were and still are among those regions of Europe characterized by producing a surplus of either cattle or sheep. Therefore a strong market relationship with the neighbouring lowlands has existed at all times. Going back into the economic history of the Alpine regions, we are able to state that the foundation of so-called 'Schwaigen' (ranches without crop cultivation) is to be understood as a movement of agrarian colonization trying to cope with city growth in the forelands during the 12th century. It may be mentioned, too, that up to the 18th century the leasing of the oxen trade from Carinthia to Italy was regarded as one of the best sources of income for the Habsburg family.

At present a surplus of mountain farming products (dairy-products, cattle), which has to be exported, belongs to the specific economic problems of both Alpine states, Switzerland and Austria. These economic problems are, however, combined with socio-political ones, as the milk-price, subsidized by public funds, has gained a key position in agrarian politics. Although the mountain peasants never were producers of milk, they are forced now to adapt to this economic goal of lowland peasantry. Today the mountain peasant in the Alpine states mentioned above has become a producer of cattle and milk, too, in this way entering into competition with the agriculture of the foreland. To secure a chance of survival in the long run, the breeding of top quality cattle has first priority. Where this could be achieved, as in some parts of the Alps, stock farming has good prospects in the market economy.

Sheep breeding could not keep up with the surprising improvement consisting in the tripling of milk yields and meat production per head of cattle during the last generation. Two basic reasons are to be given for that:

(1) sheep were always kept on pastures providing much too poor grazing for feeding cattle;

(2) furthermore, the transhumance of sheep, a feature common to the Mediterranean world and South East Europe, is declining much faster than the traditional summer ranching economy of cattle.

Step by step the pastures utilized in winter were reduced in area by land improvement programs (Italy, Greece, Spain, Yugoslavia). There also is a decreasing demand for the typical product of transhumance, healthy but lean lambs. In the countries with a high lamb consumption, as in Great Britain and France, the lambs are being fattened on lowland estates now.

There seems to be no chance of survival for the transhumance. To give an example from the French Central Massif: One generation ago one million sheep were comprised, now only a little more than 100,000 are on the move. The crisis of summer ranching can be grasped best in the Alps, where it constitutes a highly sophisticated system and is of general importance. What are the features of the crisis?

(1) the very complicated pattern of seasonal migration with three levels (low, intermediate and high pasture), requiring much labour, is on its way to being reduced into a one level migration;

(2) the number of dairy cattle is declining much faster than that of young cattle;

(3) above all summer ranches at high altitudes and of poor accessibility, belonging to a single owner, are abandoned;

(4) the highest rate of abandonment is shown by the 'servitude alps', where the traditional grazing rights of peasants are redeemed by the owners of the large forest estates. This is why in the eastern parts of the Alps the number of alps has declined by 70 or more per cent. The cooperation alps, belonging to villagers and managed by trained personnel, seem to have the best chance of survival.

In many cases abandoned higher alps have been replaced by former farms. The result of this process is frightening; the upper limit of periodical settlement has declined by up to 500 m, that of permanent settlement by up to 300 m.

All over Europe the abandoned land in the high mountains is in most cases falling back to the wilderness, sometimes covered by a secondary formation of scrub, useless for the timber industry. In the German speaking parts of the Alps only and in the area of the former Austro-Hungarian Monarchy (Carpathians, Dinaric Mountains), where forestry carried out by manorial powers started as early as in the 18th and 19th centuries, this set an example followed by the peasantry. Forests are replacing the abandoned cultivated areas. Outside of these regions afforestation programs of state governments came into existence since World War II, but are still remaining at an experimental stage and of limited local importance only.

The crisis of mountain farming cannot be understood by analyzing ecological and economic variables only; in addition to both of them the study of the changing social system offers the clue for an explanation. During the eventful history of Europe the high mountains always were regions of retreat for people anxious to retain their cultural identity and political independence. Even the peasants subject to the manorial system were able to maintain a better position than those in the lowlands. The crisis of mountain peasantry has to be interpreted as the crisis of a very distinct way of life, which is now breaking down. As integrate parts of the radical transformation the following aspects might be mentioned:

- (1) the shifting of the priority given to the personal set of values: from a careful upkeep of inherited rural property to the amount of money earned;
- (2) the disorganization of the former patriarchal three generation family;
- (3) the adaptation to industrial technology and to urban consumption patterns.

The changes in the value system, in household structures and in the consumption behaviour caused rural exodus and the regression of mountain farming and settlement. In the European context they can be considered an innovation process initiated by the demolition of manorial power and the start of the liberalistic area.

A schematic profile through Continental Europe from west to east gives an overall picture of the regression stages resulting from a fundamental political change (Fig. 2).

The following stages of development can be distinguished:

- (1) increase of rural population, in some areas even a pushing-up of the settlement limit and an intensification of settlement (Southeast Europe), intensification of land use;
- (2) shifting from seasonal migration into permanent rural exodus;
- (3) extensification of land use;
- (4) abandonment of settlements.

In France, in the French Alps, Pyrenees and the French Central Massif, regression started first in Continental Europe. Therefore it is not surprising



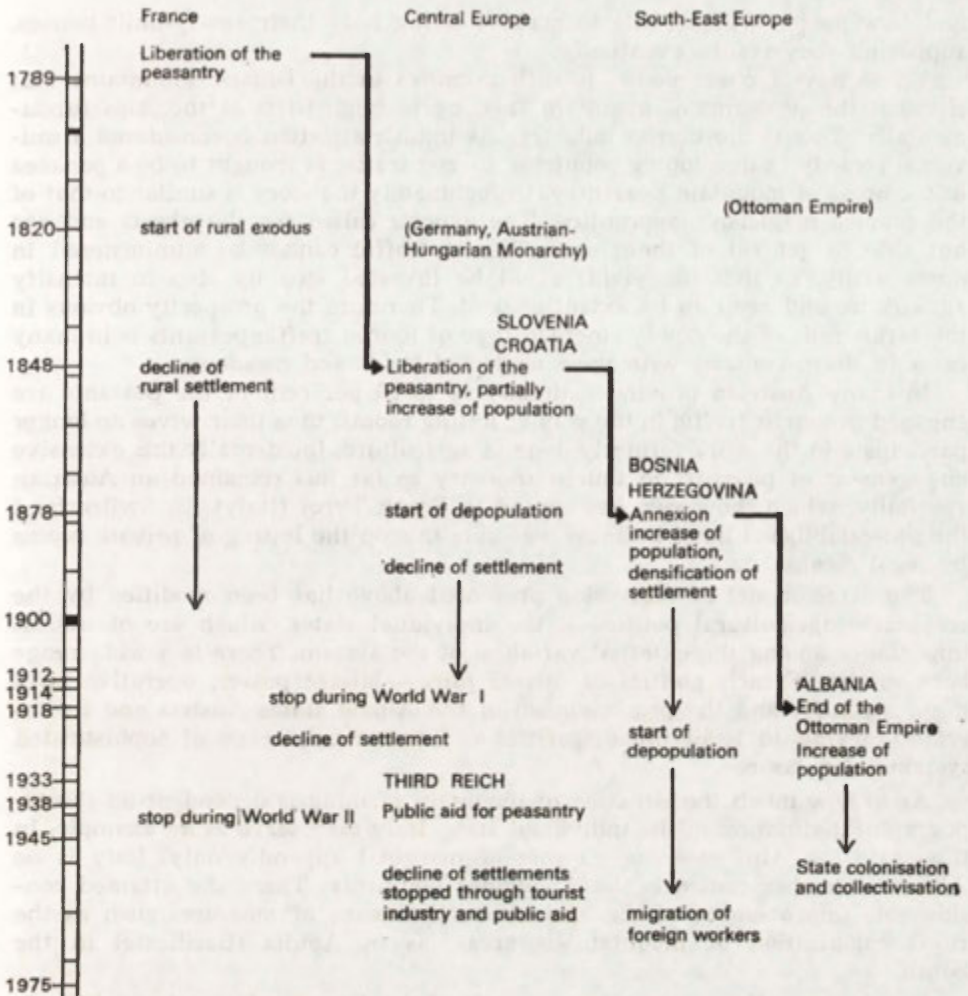


Fig. 2. The shifting of regression stages from west to east in the high mountain regions of Continental Europe

at all that the decline of mountain settlements reached a vast scope like nowhere else in Europe. A comparison between the French and the Swiss Alps is offering an impressive illustration for this: At the same time when depopulation reached its peak in the French Alps, Southeastern Europe — Bosnia, Montenegro, Serbia — just freed from the Ottoman supremacy, experienced a tremendous increase of mountain settlements, comparable to 'cellular growth'. Farmsteads started to develop 'offshoots' on higher levels. After 1912, one generation later, the same thing happened in Albania.

At present Yugoslavia has acquired an exceptional position through its emigration of workers to foreign countries, resulting in a remarkable building activity even in quite inaccessible parts of the mountains. They are favoured by a wealth of investments into the technical infrastructure (roads, wells, electricity) and even small industrial developments. In some areas one may, however, ask the question, whether the capital invested will ever earn any profit



and how people will be able to make a living near their newly-built houses, supposing they return eventually.

Up to now a phenomenon is still unknown in the Dinaric Mountains that changed the problems of mountain farming in huge parts of the Alps fundamentally. This is the tourist industry. As industrialization is considered a universal remedy in developing countries, tourist traffic is thought to be a panacea in the areas of mountain peasantry. Unfortunately the story is similar to that of the famous magician's apprentice: The experts called for the ghosts and are not able to get rid of them now. Tourist traffic cannot be administered in doses easily, so that the yields could be invested step by step to intensify agriculture and keep up its extent as well. Therefore the prosperity obvious in the farmsteads of the newly emerged type of tourist traffic peasants is in many cases in sharp contrast with their neglected fields and meadows.

In many Austrian provinces already 40 to 50 per cent of the peasants are engaged in tourist traffic in the way of letting rooms; thus their wives no longer participate in the work formerly done in agriculture. Incidentally this extensive engagement of peasants in tourist industry so far has remained an Austrian speciality, which, however, has spread to South Tyrol (Italy). In Switzerland the old-established hotel business was able to stop the letting of private rooms by legal means.

The stage model of regression presented above has been modified by the respective agricultural politics of the individual states, which are of utmost importance among the external variables of the system. There is a wide range between the French politics of *laissez faire* — *laissez passer*, operative until quite recently, and the protectionism of the Alpine states Austria and Switzerland, trying to level the disparities of income by means of sophisticated systems of measures.

As to how much the situation of mountain farming is dependent on the topographical situation in the individual state, Italy may serve as an example. In this state the Alps constitute a sort of marginal appendix only. Italy is no Alpine state, her centre is the Appenines peninsula. There she attained considerable improvement of the agriculture by means of measures such as the rural colonization of mountainous areas, as in Apulia (Basilicate) in the South.

In this connection, as a unique example of the diversified agrarian politics in Eastern Europe, Albania may be pointed out. Under the pressure of population growth the number of inhabitants doubled during the last 22 years, and, enforced by extensive measures only possible in a closed political system like hers, Albania succeeded in urging on a massive utilization of the mountainous areas. Collectivization is combined with an intensification of agriculture, orchards were planted, the cultivation of maize was extended to its utmost limit. Technical and social infrastructure has been brought in by means of substituting capital investments by concerted labour.

When crossing the border from Yugoslavia to Albania one is taught a lesson on the possible effects of political power as to the formation of the cultural landscape, all of a sudden providing us with an insight into the historical exploit of the feudal powers in clearing huge parts of the Alps, the Carpathians, etc.

At last some remarks about the degree of decline as to settlement in the European high mountains. A decrease of more than 70 per cent is characteristic of the French Central Massif, parts of the French Alps and the Italian Alps. Up to 50 per cent were reached in the Central Pyrenees, parts of the Eastern

Alps, the Carst Mountains of Herzogovina and some parts of the Apennines. On the other hand, the reduction is comparatively small at the settlement limit of the Central Alps where the owners of the farmsteads situated high up have had to cope with natural hazards for many centuries. Recently tourist traffic has helped to stabilize the settlement frontier.

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GEOGRAPHICAL TERMINOLOGY OF THE RURAL CULTURAL  
LANDSCAPE  
(REPORT ON THE PROGRESS OF THE INTERNATIONAL WORKING  
GROUP FOR THE TERMINOLOGY OF THE AGRICULTURAL  
LANDSCAPE)

CAY LIENAU

The International Working Group for the Terminology of the Agricultural Landscape, in existence since 1964 and aided by the *Stiftung Volkswagenwerk* with Professor H. Uhlig (GFR) acting as chairman, officially terminated a considerable part of its work in 1974. The Working Group was a result of the discussions within this international geographical conference on the European rural landscape which was held first time in 1957 in Nancy, France. This is the reason for to give here a short report on the problems posed and the results gathered, of an undertaking so important for the international research in cultural geography.

Geography, just as any other science, has a technical language of its own. The terminology employed in cultural geography, however, draws heavily from the vernacular and is thus closely related to it. There is a great number of regional phenomena which have been described by geographers in terms varying from one region to the next and further complicated by changes in the meaning of terms according to place and time. From all this the necessity arose to sort out and clarify terms and bring them into an unequivocal terminological frame.

In its first stages this undertaking aimed primarily at the gathering of current terms and definitions in the English, German and French languages; soon, however, the work concentrated on the establishing of so-called terminological frames. It was thought that only through these frames real improvements of communications could be achieved between scientists of different languages, since the traditional geographical terms are often hard to translate, in many instances the 'same' term comprising more meaning in one language than in another (cf. the different scope of meaning in Germ. 'Weiler' and Engl. 'hamlet').

A terminological frame in the sense used here, is made up of clearly stated characteristics which are (were) important for the comprehension of, and discrimination between, established geographical objects, processes, etc. The various characteristics are not simply 'listed', but are compared and contrasted with one another so that the whole of the frame-material is structured at the same time. One arrives at the characteristics relevant for the frame by analyzing those terms and objects that are (were) in current use in geographical writing. Priority is given to those characteristics that crop up again and again in many different existing terms.

The characteristics at which one finally arrives are, on the whole, simply-structured concepts; they are as unequivocal in meaning as they can be. To get them into a system, which is indispensable for the construction of a terminological frame, one makes use of various existing relationships between one characteristic and the other. Thus, there may be the relationship as between a whole and part of a whole or it may be as between 'general concept' and 'special concept'. Consequently, this gives rise to two types of structures (classifications) in a terminological frame: hierarchical systems (i.e. logical subdivisions of concepts or terms) on the one hand, and groupings on the basis of similarity on the other. Both may be combined in structuring a terminological frame.

For the selection of characteristics there exist no strictly objective criteria, so that, to certain degrees, the terminological frames are of a subjective character and dependent on the theoretical approach of those scientists who work out them. In spite of these shortcomings the terminological frames offer a lot in the way of:

- (a) unequivocal naming of a given geographical object in different languages,
- (b) ordering and defining the wide selection of existing terms and concepts (thus reducing the number of misunderstandings and contradictions),
- (c) showing gaps or blind spots in the existing terminology,
- (d) making explicit relationships between concepts and terms, thus yielding structured knowledge,
- (e) contributing towards a homogeneous technical language,
- (f) and lastly just because of its theoretical nature, the terminological frames may stimulate and provoke fresh questionings and new assessments.

The work of the International Working Group concentrated, among other things, on the terminology of:

- (1) rural settlements and field patterns,
- (2) rural population,
- (3) forms and types of agriculture.

Findings were published in the series "Materialien zur Terminologie der Agrarlandschaft. Basic Material for the Terminologie of the Agricultural Landscape. Matériaux pour la Terminologie du Paysage Agraire", in German, English and French, edited by Lenz-Verlag, Giessen.\*

So far the following volumes have appeared:

- Vol. I: Flur und Flurformen. Types of Field Patterns. Le Finage Agricole et sa Structure Parcelleire. Giessen 1967; second edition in preparation.
- Vol. II: Die ländlichen Siedlungen. Rural Settlements. Habitats Ruraux. Giessen 1972.
- Vol. III: Die ländliche Bevölkerung. Rural Population. La Population Rurale. Giessen 1973.

Further vols. are being prepared for publication.

In addition to the work on the so-called terminological frames, traditional geographical terms were collected and defined to serve as a foundation for the frames and to give evidence of at least a part of the variety of concepts and terms, the different methods of approach and the various forms of environmental perception. These traditional terms were compiled in the commentaries to the terminological frames hitherto published. Separate collections of English, Swedish and German terms have already been compiled, awaiting public-

\* Lenz-Verlag, D-6300 Giessen, Riegelpfad, GFR.

ation. A separate working group was established to deal with the difficult task of compiling geographical terms of the Arab-Islamic cultural area.

The research has produced numerous fresh scientific problems which will lead to further work on terminology. In many essentials the work has drawn on results of the IGU-Commission on Agricultural Typology chaired by J. Kostrowicki, Poland. The working group is still in existence as a sub-group of the IGU-Commission on Geographical Terminology chaired by E. Meynen, GFR.

Giessen University



ation. A regional working group was established in 1992 with the aim of compiling a geographical information system (GIS) for the region. The working group was formed by representatives of the regional authorities, the regional government, and the regional business community. In 1993, the working group was renamed the Regional GIS Commission. The working group is still active and is currently working on the development of a regional GIS.

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## LE DÉVELOPPEMENT DU VIGNOBLE SPÉCIALISÉ DANS LA RÉGION OMBRIENNE

ALBERTO MELELLI, RENATA PERARI

L'agriculture ombrienne, aussi bien que celle d'autres régions d'Italie, a connu tout récemment une série de transformations qui ont produit un renouveau profond des structures traditionnelles. L'exode rural et la crise du métayage sont les causes les plus déterminantes de ces changements. En même temps, les progrès technologiques du secteur de la mécanisation, les hauts et les bas des marchés extérieur et national sont venus s'ajouter aux principaux événements qui ont causé un mode différent d'utilisation du sol.

Il faut souligner le retard remarquable de l'agriculture ombrienne, dans ce processus de modernisation, par rapport à d'autres régions comme les Marches et la Toscane voisines. On a dit, à ce propos, que notre région s'est enfin tirée d'une très longue léthargie et que dans la brève période 1955-1965 il y a eu plus de transformations qu'au cours de trois siècles.

D'ailleurs, dans ces derniers dix ans l'évolution des structures agricoles est devenue plus rapide: pendant que les changements en cours se renforçaient, des innovations radicales ont bouleversé certains domaines. Ainsi s'est aggravée la crise de la polyculture traditionnelle, caractérisée par une économie d'auto-subsistance, dont l'élément le plus typique a toujours été — comme on le sait bien — la culture mixte de la vigne (*coltura promiscua*). Dans ce système de culture, qui mieux qu'aucun autre a donné une empreinte particulière au paysage rural, la vigne est associée à d'autres cultures — arbustives et herbacées — et est conduite selon plusieurs modes. L'*alberata* toscane (très diffuse à l'Ouest) et le type *folignate* (à l'Est et au Sud) ont toujours prédominé; mais au fur et à mesure le système se fait complexe par les nombreuses formes de transition, surtout depuis que les vignes basses ont comblé les intervalles entre les hautains; ces derniers temps, dans les files des nouvelles plantations, les arbres ne paraissent point (c'est le type des *filari pieni*).

Une série de facteurs concomitants d'ordre agronomique, techniques et socio-économiques (diffusion des cultures fourragères, développement de la mécanisation et de la motorisation, nouvelles demandes de marché, crise du métayage et exode rural) ont bouleversé l'équilibre séculaire de ce système polyculturel. Et la viticulture s'est énormément modernisée.

Il est incontestable que les campagnes ombriennes offrent des sols pas très favorables à la vigne, mais il faut ajouter que les agriculteurs ombriens, ancrés et peut-être attachés à des modes de culture arriérés et incapables de produire des vins réputés, se décidèrent tardivement à diffuser sur une large échelle les vignobles modernes. Les premiers essais que l'on fit à Montefalco remontent à 1890-1900; quelques autres suivirent dans les collines voisines de Bevagna-Gualdo Cattaneo-Castel Ritaldi. Les premiers résultats furent satis-

faisants et auraient pu donner de l'essor au nouveau vignoble; mais l'invasion phylloxérique, qui se manifesta par la suite à maintes reprises, causa un long temps d'arrêt. La reprise est arrivée dans le second après-guerre, d'abord incertaine, mais forte dès 1962-1963 et particulièrement intense à partir de 1965: il s'en est suivi un renversement complet dans le rapport existant entre l'ancien et le nouveau type de culture de la vigne (Tableau 1).

TABLEAU 1. Superficies plantées en vigne (en milliers d'ha) et production de raisins (en milliers de qx) en Ombrie

Années	Superficie			Production		
	vignoble spécialisé (en %)	culture "promiscua"	totale	par les vignobles spécialisés (en %)	par les vignes en culture mixte	totale
1961	1,6 (0,9)	162,2	163,8	49,2 (4,7)	1003,0	1052,2
1962	1,6 (1,0)	161,2	162,8	69,0 (5,2)	1258,4	1327,4
1963	1,6 (1,0)	156,9	158,5	74,8 (6,3)	1116,4	1191,2
1964	1,7 (1,1)	153,9	155,6	79,3 (6,6)	1127,6	1206,9
1965	2,3 (1,6)	146,9	149,2	131,2 (10,5)	1115,6	1246,8
1966	2,4 (1,6)	142,9	145,3	124,3 (9,8)	1146,6	1270,9
1967	2,5 (1,7)	138,9	141,4	147,3 (11,8)	1099,0	1246,3
1968	2,7 (2,0)	136,9	138,6	183,4 (11,5)	1084,9	1268,3
1969	5,4 (5,9)	86,9	92,3	301,3 (31,7)	648,0	949,3
1970 <sup>(1)</sup>	22,1 (28,8)	54,7	76,8	<sup>(2)</sup>	<sup>(2)</sup>	1200,1
1971	22,8 (31,0)	50,6	73,4	874,9 (82,4)	186,2	1061,1
1972	22,9 (31,7)	49,4	72,3	808,9 (83,4)	161,1	970,0
1973	22,7 (32,3)	47,5	70,2	1105,9 (85,0)	195,5	1301,4

<sup>(1)</sup> Pour les nouveaux critères de classification adoptés par l'ISTAT à partir de 1970, voir note 6.

<sup>(2)</sup> Donnée pas distincte dans l'*Annuaire statistique*.

Source: ISTAT, *Annuario di Statistica agraria*.

Depuis longtemps les experts soulignaient l'urgence de réaliser une viticulture moderne et rationnelle, mais l'acheminement à la pleine réforme a été possible grâce aux initiatives d'État et communautaires (FEOGA).

Dans le but d'améliorer les produits de qualité, le *Piano Verde n. 1*<sup>1</sup> prévoyait des contributions de 25 à 33% des dépenses nécessaires pour les vignobles à réaliser dans les zones qui montraient une vocation viticole particulière. Les nouvelles plantations, qui en 1961-1966 se levèrent surtout dans les territoires de Castiglione del Lago et d'Orvieto, occupèrent 1090 ha: au total environ 1100 exploitations (900 dans la Province de Pérouse) y prirent part. Le *Piano Verde n. 2*<sup>2</sup> a accordé des subsides financiers selon quote-parts même plus élevées (40-50%). Plus de 1200 exploitations en ont bénéficié, et la vigne a gagné en tout 1100 ha (Pérouse 973 ha, 1003 exploitations). La taille moyenne de ces nouveaux vignobles est donc restée bien modeste, au dessous de 1 ha: en effet ce sont pour la plupart les petits propriétaires exploitants qui ont joui des contributions susdites.

Mais les réalisations les plus importantes ont eu lieu lorsque avec l'aide de l'État les soutiens communautaires ont été ajoutés. Les financements joints,

<sup>1</sup> Art. 14, loi n. 454 (2 juin 1961).

<sup>2</sup> Art. 15, loi n. 910 (27 octobre 1966). Les contributions étaient accordées pour l'*impianto di vigneto in coltura specializzata nei comprensori delimitati ai sensi del D.P.R. 12 luglio 1963, n. 930 ai fini della tutela delle denominazioni di origine controllata e garantita, nonché in altre zone a specifica vocazione viticola, con preferenza a quelle collinari*.



qui couvraient 50% des frais d'implantations, devaient être accordés seulement aux vignobles à réaliser dans les terroirs à vocation viticole. La détermination de ceux-ci, qui a été achevée selon les critères techniques des organismes régionaux préposés à dessein (Inspections d'Agriculture) a mené à la construction de la carte correspondante (Fig. 1). On a évidemment tenu compte surtout de l'influence des facteurs morpho-pédo-climatiques: l'altitude (en règle générale inférieure à 600 m), la position et l'exposition des sols, enfin leurs caractères pédologiques ont fait nécessairement tomber le choix sur les terroirs de colline l'Ouest et de la partie centrale de la région. Par conséquent, le peu d'aptitude des sols des hautes collines et des montagnes (fertilité modeste, pentes fortes, vallées étroites et peu ensoleillées, froids excessifs, etc.) ont exclu presque entièrement les terres septentrionales et celles de l'Est.

Les plaines aussi n'avaient pas suffisamment de qualités requises pour une viticulture appréciable à cause des terrains souvent très lourds et humides, et surtout des conditions climatiques défavorables: l'inversion de température, les brouillards, les givres et les gelées tardives, etc. (il s'agit de phénomènes qu'on explique le plus souvent par la forme allongée et l'orientation longitudinale de ces territoires, qui sont battus par les vents froids du Nord au début du printemps et par le sirocco pendant l'été). D'ailleurs, les sols des plaines, fertiles mais peu étendus<sup>3</sup>, sont voués aujourd'hui à des cultures plus indiquées et rentables telles que le tabac, la betterave sucrière, le tournesol, les plantes fourragères, etc.

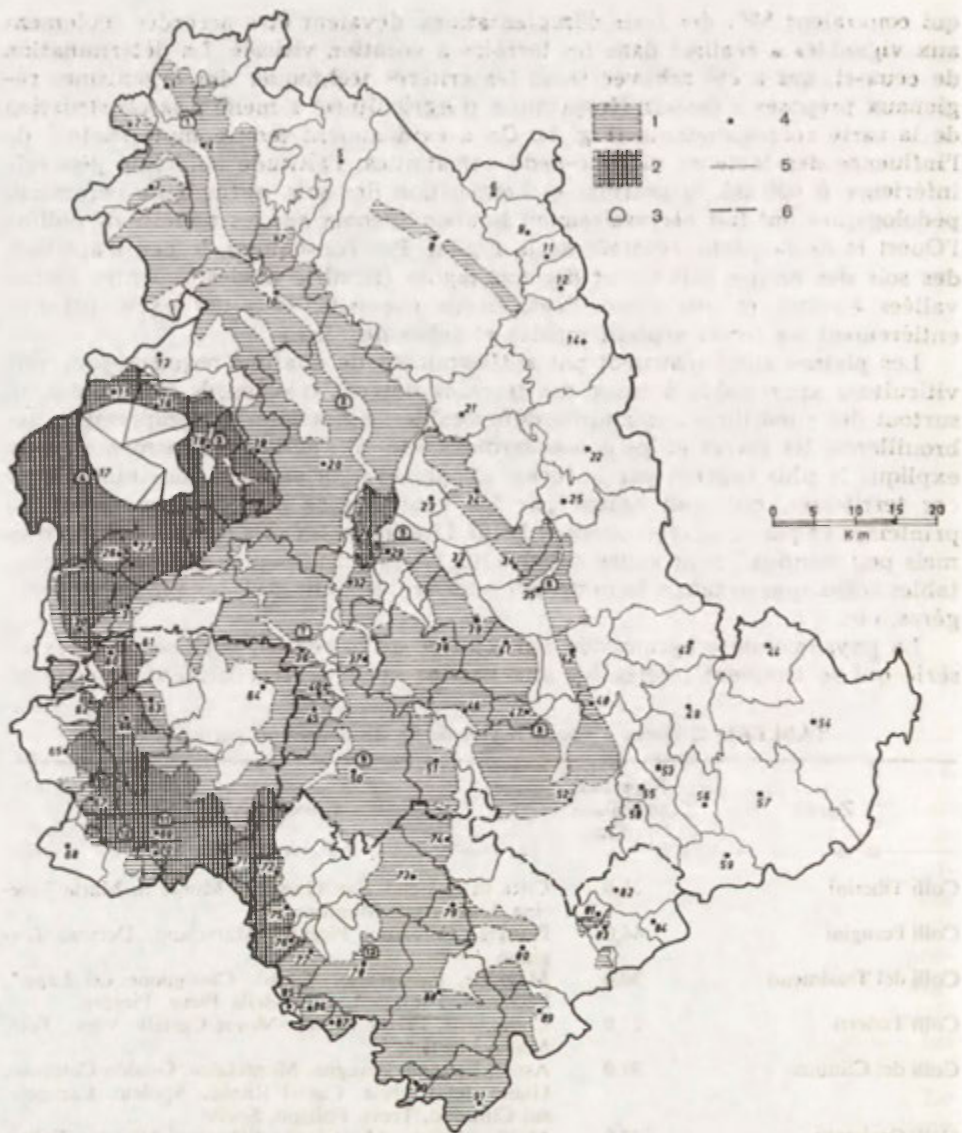
La physionomie orographique particulière de la région, avec ses chaînes en série qui se trouvent intercalées aux bassins et en se fractionnant descendent

TABLEAU 2. Zones à vocation viticole de dénomination particulière

Zones	Superficie (en milliers d'ha)	Communes
Colli Tiberini	28,0	Città di Castello, San Giustino, Monte S. Maria Tiberina, Umbertide, Montone
Colli Perugini	44,0	Perugia, Corciano, Piegara, Marsciano, Deruta, Torgiano
Colli del Trasimeno	30,0	Magione, Passignano, Tuoro, Castiglione del Lago*, Paciano*, Panicale*, Città della Pieve, Piegara
Colli Tuderti	27,0	Collazzone, Fratta Todina, Monte Castello Vibio, Todi, Massa Martana
Colli del Clitunno	39,0	Assisi, Bettona, Bevagna, Montefalco, Gualdo Cattaneo, Giano dell'Umbria, Castel Ritaldi, Spoleto, Campello sul Clitunno, Trevi, Foligno, Spello
Colli Orvietani	42,0	Montegabbione, Monteleone d'Orvieto, Allerona, Fabro, Ficulle*, Parrano, Orvieto, Castel Viscardo, Castel Giorgio, Porano*, Baschi, Montecchio, Guardia, Alviano
Colli Amerini	11,5	Amelia, Lugnano in Teverina, Attigliano, Giove, Penna in Teverina
Colli di San Gemini	11,0	San Gemini*, Montecastrilli, Acquasparta
Basso Nera	21,0	Narni, Otricoli, Calvi dell'Umbria, Stroncone, Terni

\* L'astérisque est placé après les communes entièrement incluses dans les terroirs à vocation viticole. Evidemment, une partie des territoires de Castiglione del Lago et de Panicale est constituée par le Lac Trasimène. De toute façon, pour les calculs approximatifs des superficies, on a déduit les zones occupées par les bâtiments, les routes, les canaux etc. (surface improductive)

<sup>3</sup> La véritable plaine n'occupe que 6% du territoire régional.



## COMMUNES

- |                          |                       |
|--------------------------|-----------------------|
| 1. Assisi                | 14. Collazzone        |
| 2. Bastia Umbra          | 15. Corciano          |
| 3. Bettona               | 16. Costacciaro       |
| 4. Bevagna               | 17. Deruta            |
| 5. Campello sul Clitunno | 18. Foligno           |
| 6. Cannara               | 19. Fossato di Vico   |
| 7. Cascia                | 20. Fratta Todina     |
| 8. Castel Ritaldi        | 21. Giano dell'Umbria |
| 9. Castiglione del Lago  | 22. Gualdo Cattaneo   |
| 10. Cerreto di Spoleto   | 23. Gualdo Tadino     |
| 11. Citerna              | 24. Gubbio            |
| 12. Città della Pieve    | 25. Lisciano Niccone  |
| 13. Città di Castello    | 26. Magione           |

- |                              |                          |
|------------------------------|--------------------------|
| 27. Marsciano                | 60. Acquasparta          |
| 28. Massa Martana            | 61. Alleronza            |
| 29. Monte Castello di Vibio  | 62. Alviano              |
| 30. Montefalco               | 63. Amelia               |
| 31. Monteleone di Spoleto    | 64. Arrone               |
| 32. Monte S. M. Tiberina     | 65. Attigliano           |
| 33. Montone                  | 66. Baschi               |
| 34. Nocera Umbra             | 67. Calvi dell'Umbria    |
| 35. Norcia                   | 68. Castel Giorgio       |
| 36. Paciano                  | 69. Castel Viscardo      |
| 37. Panicale                 | 70. Fabro                |
| 38. Passignano sul Trasimeno | 71. Ferentillo           |
| 39. Perugia                  | 72. Ficulle              |
| 40. Piegaro                  | 73. Giove                |
| 41. Pietralunga              | 74. Guardea              |
| 42. Poggiodomo               | 75. Lugnara in Teverina  |
| 43. Preci                    | 76. Montecastrilli       |
| 44. San Giustino             | 77. Montecchio           |
| 45. Sant'Anatolia di Narco   | 78. Montefranco          |
| 46. Scheggia e Pascelupo     | 79. Montegabbione        |
| 47. Scheggino                | 80. Monteleone d'Orvieto |
| 48. Sellano                  | 81. Narni                |
| 49. Sigillo                  | 82. Orvieto              |
| 50. Spello                   | 83. Otricoli             |
| 51. Spoleto                  | 84. Parrano              |
| 52. Todi                     | 85. Penna in Teverina    |
| 53. Torgiano                 | 86. Polino               |
| 54. Trevi                    | 87. Porano               |
| 55. Tuoro sul Trasimeno      | 88. San Gemini           |
| 56. Umbertide                | 89. San Venanzo          |
| 57. Valfabbrica              | 90. Stroncone            |
| 58. Vallo di Nera            | 91. Terni                |
| 59. Valtopina                |                          |

Fig. 1. Ombrie: carte des sols à vocation viticole

1 — Terroirs à vocation viticole, 2 — zones de production des vins à D.O.C., 3 — caves coopératives, 4 — communes, 5 — limite de commune, 6 — limite de province. — *Elabor. G. Montilli*

vers l'Ouest, a causé beaucoup de solutions de continuité aux territoires à vocation viticole. Malgré cela, il est possible de déterminer des zones assez homogènes, auxquelles on attribue maintenant une dénomination particulière (Tableau 2).

En définitive, les zones *vocazionali* se développent à peu près sur le même plan altimétrique, mais sur des terroirs différents quant à la morphologie et à la pédologie. En effet, l'Ombrie de l'Ouest se compose la plupart du temps de collines modestes, d'où la vigne s'étend vers le bas jusqu'aux bords des dépressions qui morcellent la continuité de la culture. Mais plus à l'Est les sols vocationnels s'allongent et côtoient les bassins (Conca di Gubbio, Valle Umbra, Valtiberina), ou s'étendent sur les versants des montagnes bordant la vallée moyenne du Tibre et qui vers le Sud deviennent plus massives (Amerino et Narnense). Effectivement, outre le traditionnel milieu d'élection des collines plio-quaternaires occidentales et des sols volcaniques de l'Orvietano, on a reconnu l'aptitude viticole même aux pentes des reliefs calcaires, plus exactement en correspondance avec les glacis détritiques et les sols lacustres du Villafanchien.

A l'intérieur des terroirs susdits, à la suite de la reconnaissance de la dénomination d'origine contrôlée, on peut ultérieurement délimiter trois zones: celles des vins *Torgiano*, *Colli del Trasimeno* et *Orvieto*<sup>4</sup>. La première de ces

<sup>4</sup> Le *Torgiano* rouge et blanc est entré dans le tableau des vins à D.O.C. le 20 mars 1968, le vin *Colli del Trasimeno* le 13 janvier 1972. A cause de controverses — en fait



zones (2600 ha) comprend les cols de Torgiano, là où le bassin de Spolète rejoint la vallée du Tibre, à l'exclusion des terrains alluviaux qui se trouvent le long des fleuves Tibre et Chiascio et des fossés qui descendent du flanc nord de la colline de Brufa. La zone de production du vin *Colli del Trasimeno* (57 000 ha) est représentée par les collines qui environnent le lac; elle s'avance vers le Sud et inclut en partie les communes de Castiglione del Lago, Città della Pieve, Paciano, Piegaro, Pérouse, Corciano, Magione, Passignano, Tuoro. En général, les plaines et les fonds de vallée, ainsi que les terrains au-dessus de 500 m, sont exclus. L'*Orvieto* est produit dans une zone (42 000 ha) qui a une forme allongée, en direction NO-SE, et comprend entièrement ou en partie les territoires d'Orvieto, Allerona, Baschi, Castel Giorgio, Castel Viscardo, Ficulle, Montecchio, Fabro, Montegabbione, Monteleone d'Orvieto, Castiglione in Teverina \*, Civitella d'Agliano \*, Graffignano \*, Lubriano \*, Bagnoregio e Parrano \*<sup>5</sup>. Même dans ce cas, les fonds de vallée, aux sols humides et pas assez ensoleillés, ne sont pas inclus. De toute façon, l'altitude doit se maintenir au-dessus de 100 m sans dépasser 500 m.

La superficie que le vignoble spécialisé occupe actuellement dans la région entière s'élève, selon l'ISTAT, à 23 000 ha environ. Plus exactement, cette donnée se rapporte à la vigne en culture *principale* qui, outre le vignoble *puro*, inclut la culture *mista prevalente* \*.

Il en résulte que le vignoble spécialisé proprement dit occupe à peu près 13 200 ha (Province de Pérouse, 9500). Cette donnée inclut le vignoble *puro* qui existait aux débuts des années soixante (presque 1600 ha), mais pour la plupart elle est représentée par les nouvelles plantations qu'on a réalisés dans l'espace de ces derniers quinze ans à titre privé<sup>7</sup> et surtout avec les contributions d'État-communautaires citées plus haut.

de délimitation de la zone à D.O.C. — entre les viticulteurs d'Orvieto et ceux des territoires limitrophes du Viterbese et du Ternano, la reconnaissance pour l'*Orvieto* (D.P.R. du 7 août 1971) est arrivée très tard, même si notoirement ce vin a toujours joui d'une grande réputation.

<sup>5</sup> L'astérisque indique les communes appartenant à la Province de Viterbe.

<sup>6</sup> Plus d'une fois les relevés des statistiques ont changé de méthode, dans le but d'établir une distinction précise autant que possible entre le vignoble et la vigne en culture mixte (*promiscua*); mais les nombreux types cultureux de transition ont toujours rendu le relevé fort malaisé. Le cadastre agraire de 1911 tenait compte de la promiscuité des cultures arbustives et herbacées (un vignoble où les intervalles sontensemencés appartient à la culture mixte); la surface couverte (*area d'insidenza*) était, en 1929, l'élément à évaluer: il y culture mixte lorsque les plantations couvrent moins de 50% des emblavures. Plus récemment on avait adopté le critère de la densité des arbres, de même que les statuts communaux des XIV-XV siècles. A partir de 1970 (et ces normes ont été appliquées dans le nouveau *Catasto viticolo*) la distinction entre culture *specializzata* et *promiscua* a été abandonnée: on parle de culture "principale" lorsque la vigne est la seule sur le champ (*pura*) ou est associée à des cultures arbustives et/ou herbacées, mais elle reste la plus importante au point de vue de la production annuelle (*mista prevalente*): on la classe en culture *secondaria* si elle est unie à d'autres cultures et vaut moins que celles-ci. Donc on tient compte du critère économique (valeur de la production) et pas du critère physique adopté précédemment. D'après les données analytiques que les Inspections ont volontiers communiquées, en 1975 la culture "principale" de la vigne fait enregistrer la situation suivante:

	Pérouse	Terni	Ombrie
en culture <i>pura</i>	9491	3700	13191
en culture <i>mista prevalente</i>	2871	7045	9916
superficie totale	12362 ha	10745 ha	23107 ha

<sup>7</sup> En ce cas on n'a pas bénéficié des soutiens financiers, à cause de l'esprit d'indépendance des exploitations, car les terrains étaient hors des zones à vocation viticole. Nous devons mentionner ici la loi régionale du 30 mai 1974 n. 38 par laquelle des sub-

Les premières tranches de travaux furent exécutées en terroirs d'élection, c'est-à-dire dans les collines du Trasimène, de Pérouse, de Marsciano, de Bettona et d'Orvieto: ensuite elles furent étendues le long de la vallée du Tibre, surtout vers le Sud (les travaux ont marché par tranches: 1966-1967; 1967-1968; 1969-1971; 1972-1973)<sup>8</sup>.

Les communes d'Orvieto (1005 ha), Pérouse (847 ha), Castiglione del Lago (805 ha), Marsciano (527 ha) occupent les premières places dans les valeurs absolues de superficie. Mais, si l'on tenait compte de l'étendue du territoire communal et en particulier de la superficie vocationnelle, les index de densité ne garderaient point la même gradation et défileraient suivant un ordre différent: Castiglione del Lago, Castel Ritaldi, Fratta Todina, Campello sul Clitunno, Montegabbione, Orvieto, Baschi, Montecchio, etc.<sup>9</sup> On peut dire autant en ce qui concerne la taille moyenne des vignobles (1,6 ha), laquelle cache bien des différences. En disposant des données très analytiques, à l'échelon d'exploitation, pour les nouveaux vignobles FEOGA nous avons dressé le Tableau 3, dans la seconde partie duquel on peut remarquer l'étendue par classes de taille (l'enquête a été limitée à la Province de Pérouse). On note ainsi que le nombre des grands vignobles (classes 3 et 4) est très modeste, mais ceux-ci occupent presque le tiers de la surface totale; les vignobles de 2-3 ha prédominent (48%) et ceux qui ne dépassent pas 1 ha sont eux aussi très fréquents (39%). On peut généralement expliquer cela par la taille modeste des exploitations qui cultivent la vigne<sup>10</sup>. Excepté quelques régions agraires où le vignoble spécialisé se répandit fortement (Castiglione del Lago, Torgiano, Orvieto), ou quelques domaines qui ont industrialisé la culture en plantant en vigne plusieurs dizaines d'hectares, on peut dire que dans la plupart des exploitations en question la vigne ne tient pas une place secondaire, mais elle n'est pas prédominante: le vignoble, de dimension modeste (pas plus de 20-25% de la surface cultivée) est à côté des autres principales cultures de l'exploitation, telles que l'olivier, le maïs, les plantes fourragères, etc.

Les conséquences économiques mises à part, cette grande oeuvre de modernisation du secteur viticole a pris une importance considérable à l'égard du paysage rural. En effet les vignobles modernes ont remplacé la culture mixte traditionnelle dans le rapport de 90-95%: et cela conformément aux directives suggérées par les experts. Effectivement les projets prévoient en principe la substitution des vieilles plantations par les nouveaux vignobles. En particulier donc pour l'Ombrie le plan de modernisation a touché surtout les terres plantées de vigne en culture mixte<sup>11</sup>. Celles-ci (Tableau 1) ont diminué sen-

sides très limités (20 millions au total) ont été affectés au profit des petits propriétaires exploitants qui n'ont pu jouir des bénéfices d'État-communautaires.

<sup>8</sup> En 1973 un projet pour une 5 tranche avait été soumis vainement à l'approbation. L'année d'après il a été proposé à nouveau en limitant les programmes aux zones à D.O.C. du Trasimène et d'Orvieto.

<sup>9</sup> Dans ce but nous avons évalué l'étendue de la superficie viticole vocationnelle des communes les plus intéressées aux programmes de reconstitution. Evidemment la superficie s'est avérée supérieure au réel, la carte étant basée sur des critères altimétriques et pédologiques qui excluent les détails morphologiques, les agglomérations, les routes, etc. Mais en tenant compte de tout cela, il a été possible d'évaluer approximativement le taux de densité des nouveaux vignobles par rapport à la superficie vocationnelle.

<sup>10</sup> Après tout, en général on peut en dire autant pour l'Italie Centrale (cfr. TIRO-NE L., La vigne dans l'exploitation agricole en Italie, *Méditerranée*, Aix-en-Provence, 1970, p. 339-362).

<sup>11</sup> Au fin de maintenir les niveaux de production effective des débuts des années cinquante (1 700 000-1 800 000 qx de raisins), en général on a décidé de remplacer la culture mixte par le vignoble spécialisé dans le rapport de superficie 4:1.



TABLEAU 3. Vignobles réalisés (ou en course d'exécution) avec les subsides d'État-FEOGA dans la Province de Pérouse

	IV tranche			V tranche			VI tranche			VII tranche			Total		
	nom- bre des explo- ita- tions	super- ficie (en ha)	taille moyenne (en ha)	nom- bre des explo- ita- tions	super- ficie (en ha)	taille moyenne (en ha)	nom- bre des explo- ita- tions	super- ficie (en ha)	taille moyenne (en ha)	nom- bre des explo- ita- tions	super- ficie (en ha)	taille moyenne (en ha)	nom- bre des explo- ita- tions	super- ficie (en ha)	taille moyenne (en ha)
Total	261	827	3,2	488	1369	2,8	456	927	2,0	276	470	1,7	1481	3593	2,4
Classes de superficie			% de la superficie totale			% de la superficie totale			% de la superficie totale			% de la superficie totale			% de la superficie totale
0,5-1 ha	76	152	18,4	151	115	8,4	220	152	16,4	131	103	22,0	578	522	14,5
1-5 ha	146	410	49,5	215	767	56,1	212	516	55,6	138	312	66,4	711	2005	55,8
5-10 ha	27	71	8,7	46	313	22,8	14	104	11,3	6	39	8,3	93	528	14,7
plus de 10 ha	12	194	23,4	18	174	12,7	10	155	16,7	1	16	3,3	41	538	15,0

Source: Ente Autonomo per la Bonifica, Irrigazione e Valorizzazione fondiaria.



siblement: en 1961-1962 elles occupaient plus de 160 000 ha, mais ont baissé à moins de 87 000 en 1969 et à 47 000 ha en 1973 (l'application des nouveaux critères des relevés statistiques à partir de 1970 contribue à expliquer l'exiguïté de la dernière donnée). On remarque très facilement le changement saisissant du rapport *coltura promiscua*-vignoble spécialisé: à la première revient actuellement moins de 68% (99% en 1961) de la surface plantée en vigne.

Il s'en suit de là que la viticulture ombrienne traditionnelle est à son déclin en plusieurs zones. Depuis quelques années, de puissants tracteurs s'acharnent sur les vieilles plantations: on a abattu par milliers les érables, les ormes et les autres arbres qui avaient fonction de soutien et constituaient un véritable bois clair (*bosco sparso*), une troisième culture à côté de la vigne et des plantes herbacées<sup>12</sup>; quelques années ont suffi à faire disparaître un paysage qui, après avoir été construit sagement et avec une patience vraiment louable, n'avait pas changé pendant des siècles.

Il est évident que des transformations sensibles ont eu lieu aussi dans les plaines, où la vigne en culture mixte s'était extrêmement répandue après les assèchements des XV et XVI siècles. Mais ici, à travers l'abattage des arbres, on a voulu gagné des pièces de terre assez larges destinées aux cultures mécanisées, souvent industrielles. Ainsi, à des champs abondamment arborés, caractérisés par des ouillères et assez mouvementés en ce qui concerne les cultures, un nouveau paysage a succédé, plus uniforme, celui des champs nus<sup>13</sup>.

Au contraire, dans les zones de collines c'est la vigne qui a donné une empreinte particulière au paysage. Les *alberate* ont cédé au vignoble spécialisé, caractérisé par sa structure spécifique qui vient de l'application de règles d'ordre technique:

- distance de 1,5-2,5 m entre deux ceps sur la rangée;
- distance de 3-5 m (en général 3,20-3,30 m) d'une rangée à l'autre;
- distance de 10 m pour les échelas (en ciment armé, bien rarement en bois de châtaignier).

Les petits échelas qui soutiennent chaque cep (pour la plupart en bois de châtaignier ou d'orme) et 3-4 ordres de fil de fer en position horizontale complètent la structure essentielle du vignoble. Les systèmes de culture les plus employés sont la *palmetta* (ou Guyot multiple) et le cordon horizontal (Sylvoz). On compte sur les doigts de la main les cas de culture à *tendone* (Piana di Castiglione del Lago, Spolète).

<sup>12</sup> De ces arbres (érables, ormes, peupliers, frênes, ornes, oliviers) l'agriculteur a toujours tiré des avantages: la protection de la vigne des gelées et des autres phénomènes météorologiques adverses, une défense plus facile du phylloxéra, du fourrage et du bois, quelquefois des fruits, la possibilité de pâturage sur les chaumes. Le système de la vigne mariée à l'arbre, que l'on pratiquait déjà dans les temps anciens, s'imposa à partir du XVI siècle et se répandit surtout au XIX et du début du XX siècle. Actuellement, même en admettant qu'il y a des défauts et des inconvénients (trop d'ombre pour la vigne, "antagonisme" alimentaire entre celle-ci et le tuteur, obstacle à la pratique des traitements fongicides et spécialement de la mécanisation), d'après les experts l'abattage des *alberate* ne devrait pas être si aveugle et inconsidéré, surtout dans les plaines; ici en effet les arbres assurent un certain équilibre hydrologique aux sols humides, protègent des vents et des brouillards stagnants dans les couches d'air les plus basses, etc.

<sup>13</sup> Mais il est juste de remarquer la réalisation des nouveaux vignobles aussi dans les plaines. En effet, si les exploitants estiment d'autres cultures plus appropriées et convenables, il ne paraît pas qu'ils puissent se passer d'un certain nombre de vignes: c'est l'attachement de l'agriculteur à son propre vin, le "culte" qu'il a toujours porté à la vigne, ou le concept de l'exploitation qui ne doit pas manquer d'une pièce de terre plantée en vigne. Aussi dans les plaines (Valle Umbra, par exemple), on peut donc voir de nouveaux vignobles qui ne diffèrent point des modernes vignobles des collines.

Les changements de distance des rangées — très variables dans le cas de la culture mixte (15-30 m en général, mais elles diminuent sensiblement près des agglomérations et des potagers suburbains en particulier) — et l'emploi des tuteurs morts à la place des arbres, constituent les plus importants éléments de différenciation entre les deux types de culture. Ces distances ont fini par bien distinguer les nouveaux des vieux vignobles spécialisés: en effet dans les vignobles de la première moitié du XX siècle la distance d'une file à l'autre ne dépassait pas 2 m et la densité des ceps touchait à 5000-6000 à l'hectare (aujourd'hui 1500-2000).

Des formes géométriquement parfaites marquent les vignobles modernes. L'ordre était aussi dans la culture mixte; mais les différences marquées par les hautains et parfois même par les vignes (espèces végétales diverses et d'un âge pas égal, distances pas toujours constantes), ainsi que la variété des cultures dans les planches de labour délimitées par les files ne donnaient certainement pas au vignoble l'homogénéité qui caractérise une monoculture.

Mais l'accroissement remarquable du vignoble spécialisé — qui autrefois était restreint à des pièces de terre exiguës et éparpillées<sup>14</sup> — au détriment de la vigne en culture mixte a causé d'autres modifications des paysages des collines ombriennes. En particulier, la mécanisation, destinée à faciliter les travaux de culture, a provoqué parfois l'assouplissement de la morphologie au moyen des aplanissements sur les versants un peu raides ou interrompus par quelques rideaux. D'ailleurs la pente modeste des surfaces<sup>15</sup> a amoindri l'importance de la "marquetterie" des types d'aménagement (par *traverso*, à *rittochino*, à *girapoggio*, à *cavalcapoggio*) qui dans plusieurs zones de collines constituent un élément fondamental de transformation du modelé.

L'emploi des machines, répandues surtout dans les exploitations avec salariés (en particulier dans la partie occidentale, le "bastion" de la grande propriété et du métayage) réduit considérablement les temps de travail: l'agriculteur va au vignoble seulement pour cultiver la vigne. En effet les cultures entre les rangées ne seraient pas du tout aisées, de toute façon se révéleraient peu rationnelles et elles ne sont pas admises dans les vignobles subventionnés, même si pendant quelques mois de l'année un peu de lupinelle et de féverole destinées à l'enfouissement peuvent occuper les petites langues de terre entre les files. Enfin, là où le vignoble spécialisé a pris la place de la polyculture traditionnelle et les salariés celle des métayers, on peut même voir quelques fermes abandonnées, car la présence continue de l'agriculteur n'est plus nécessaire.

Quant aux aspects économiques de cette nouvelle viticulture, on doit remarquer ce qui suit:

(a) le renversement total du rapport de production entre la vigne en culture mixte et le vignoble spécialisé par suite du passage d'une culture extensive à un système très rationnel, productif et donc plus avantageux<sup>16</sup>;

<sup>14</sup> L'étendue minimale du nouveau vignoble est fixée à 0,50 ha; au contraire, au fin de *non fare troppa vite* et d'insérer le vignoble en proportion juste dans l'exploitation (le système de production doit se baser sur 2-3 cultures ainsi qu'il réalise une utilisation avantageuse de la main-d'œuvre au cours de l'année entière), en général son étendue ne devait pas dépasser le cinquième des terres de l'exploitation même.

<sup>15</sup> La surface des nouveaux vignobles admis aux subsides ne doit pas dépasser la pente de 10‰.

<sup>16</sup> La flexion remarquable des données de production de la culture *promiscua* (voir Tableau 1) doit être expliquée aussi par les nouveaux relevés statistiques (voir note 6). Nous devons bien remarquer que de 1967 à 1972 la production totale a accusé un recul car la culture mixte s'est réduite d'année en année tandis que la plupart de ces nouveaux vignobles n'étaient pas encore entrés en production (selon le *Catasto Viticolo* de l'an 1970 4143 ha des 10 759 ha en culture *pura* étaient occupés par des



(b) l'amélioration de la qualité, qui a résulté pas seulement en plantant la vigne dans les sols plus indiqués des collines, mais aussi par l'application des normes modernes des techniques et de l'économie viticole (engrais plus appropriés), par les progrès dans la lutte phytosanitaire, par une meilleure préparation technique des viticulteurs, etc. Tout cela prend une grande valeur si l'on considère qu'en Ombrie presque tous les vins ont toujours laissé à désirer en fait de qualité; trois fois sur cinq les raisins ne parviennent pas à maturation complète (les gelées et les froids tardifs en avril-mai, l'humidité de septembre et le rafraîchissement de température en octobre souvent maintiennent la "constante thermique" au-dessous des 3200° nécessaires);

(c) passage d'une production fondée sur l'auto-subsistance à un type de production qui peut s'insérer dans un système économique industrialisé et commercialisé. Les infrastructures nécessaires à ces processus s'identifient principalement avec les caves coopératives qui ont été créées ou agrandies par l'*Ente di Sviluppo* avec les subsides financiers d'État-communautaires. Actuellement 12 caves coopératives (9 dans la Province de Pérouse) fonctionnent en Ombrie (Tableau 4 et Fig. 1); leur capacité de travail s'élève à 366 000 qx de raisins.

En conclusion, sous la poussée de facteurs d'ordre social, économique et technologique, une évolution profonde vient de toucher la viticulture ombrienne. Une grande oeuvre de reconstitution a modifié en partie la distribution et surtout le mode de culture de la vigne à la suite de l'essor du vignoble spécialisé et du déclin simultané des vignes en *colture promiscua*.

TABLEAU 4. Caves coopératives en Ombrie

Num*. Dénomination des caves	Contenance (en milliers d'hectolitres)	Quantité de raisins travaillés de 1970 à 1974				
		1970	1971	1972	1973	1974
1 Alto Tiberina	7,5	2 927	2 961	1 750	2 159	3 210
2 Perusia	29,2	9 071	10 075	9 530	13 000	19 513
3 C.S. di Magione	22,3	—	—	—	4 130	9 358
4 C.S. del Trasimeno	70,0	27 835	33 956	38 880	64 673	77 956
5 C.S. di Bettona	25,2	6 230	6 350	7 903	22 469	13 056
6 C.S. di Foligno	32,0	15 437	20 045	12 047	17 310	26 000
7 C.S. di Marsciano	42,4	12 226	19 600	21 030	40 180	54 746
8 C.S. Colli Spoleitini	22,3	—	—	—	4 080	9 358
9 I.M.A.T. (Todi)	29,2	10 939	14 910	15 900	22 500	28 567
10 VI.C.OR. (Castel Viscardo)	24,0	20 577	17 058	19 492	21 448	31 500
11 CO.VI.O. (Orvieto)	59,0	40 065	36 121	35 528	41 185	74 507
12 C.S. di Sugano	6,5	6 270	(1)	(1)	(1)	6 550
13 C.S. del Basso Nera e Colli Amerini (2)	20,0	—	—	—	—	—
Total	389,6	151 577	161 076	162 060	253 134	354 321

\* Les nombres se rapportent à la carte correspondante (Fig. 1); (1) Données pas relevées; (2) On va achever la construction de cette cave, qui entrera en fonction l'année courante.

Source: *Ispettorati Agrari et Ente di Sviluppo nell'Umbria*.

ceps en bas âge, au dessous de 3 ans, et 2396 ha appartenaient aux ceps de 4-6 ans; au contraire, environ 70% des 54 641 ha en culture *secondaria* revenait aux ceps au dessus de 30 ans). Mais en 1973 on pouvait déjà remarquer une reprise qui, après les experts du secteur, devra atteindre près de 2 millions de qx vers la fin des années soixante-dix.



Mais il faut bien remarquer que l'extension des vignobles spécialisés a subi un arrêt depuis une année; cette stagnation ne vient pas du fait qu'en Ombrie les niveaux de production programmés ont été franchis; en effet c'est la crise vinicole en cours, à l'échelon international comme chacun sait, qui doit être mise en cause. Cependant une conclusion pas inconsidérée nous mène à soutenir que, si des changements ultérieurs ne modifient plus l'utilisation du territoire viticole — de toute façon la vigne ne gagnera pas beaucoup de terre dans les plaines —, ce sont les nouveaux vignobles des collines qui à l'avenir fourniront l'Ombrie de bons vins.

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## SMALL-HOLDER COLONIZATION IN THE HEATHLANDS OF NORTHWEST GERMANY DURING THE 18th AND 19th CENTURY

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In his paper read at the Vadstena symposium of the IGU Congress (1960) with the title *Allmendteilungen in Nordwestdeutschland* (Partition of the Commons in Northwest Germany) Professor Jäger emphasized the importance of government activities for the development of the rural landscape in the 18/19th century. It is the intention of my paper to stress this point and show how settlement activities in the heath and peatbog wastelands, sponsored or directed by state authorities during the 18/19th century in some regions of the northwest German lowlands increased the number of holdings by 100 to 400 per cent. Most of the new units were not real full-time farms but small-holdings from less than 1 ha to a few hectares only, not even enough for subsistence. The owners had to work as craftsmen, day-labourers, with seasonal migration to the Netherlands in summer, and their most important source of income was home-spinning and weaving.

On the other hand, in southwest Germany — the upper Rhine and Neckar regions — where at the same time almost no land resources were available for reclamation, the tremendous increase of rural population after the end of the Thirty Years War led to emigration of several hundred thousand landless villagers to America, to the Danube plains of the Habsburg empire, to south Russia, to Denmark, and to Prussia. Nevertheless the compact village of southwest Germany grew, but mostly by fragmentation of holdings and by adding houses of landless labourers. The cultivated area could not be expanded.

In the northwest German lowlands west of the Weser river, the establishment of small-holdings in the heath and peatbog areas led to an expansion of cultivated land with numerous dispersed new farms and even new communities. They fill up the vacant spaces which in former centuries were covered by the heath and peatbog commons of the older settlements of medieval origin.

So far not very much of research activity has been concentrated on this settlement movement compared with research on the older strata of settlements. But if it is our aim to understand and explain the genesis of the cultural landscape of today, then we should concentrate more efforts on the settlement movements of the 18/19th century in those parts of Europe where they were important: not only in northwest Germany, but also in the Netherlands, in Denmark and Sweden, in Poland, and other European countries with wasteland resources for colonization activities in a period of growing rural population and before industrialization in the cities attracted the landless villagers.

In our department in Göttingen we have started a research programme for the lowland Weser-Ems-region which comprizes parts of the former Kurfürstentum of Hannover, the County, later on the Dukedome of Oldenburg, and

Ostfriesland which from 1744-1815 was a province of Prussia and from 1815-1866 of Hannover. We have excluded the so-called Fehn-colonies of the peatbogs on which several studies have already been published.

Our research is still in an initial stage, and hence I can give only a preliminary report. We are concentrating on the colonization process which includes the study of:

(1) the character of the area so far unsettled — how was it used before and by whom; how was the quality of land for cultivation and to which extent did this quality further or delay colonization?

(2) the government institutions with their settlement activities, and the intentions and ideas behind their settlement policy which may have been influenced by other states,

(3) the settlers or colonists — where did they come from, what was their social and economic position before, and after they were settled as small-peasants? What were their activities in the settlement process? By which means and techniques did they reclaim and cultivate the wasteland lots?

(4) the farmers of the village communities who so far had used the heath commons — how did they react to colonization? It is quite clear that conflicts must have arisen. How were they solved?

(5) the spatial results of the settlement activities which include the type of farming economy of the new settlers, the pattern of settlement, which means the type of farmhouses, the distributional pattern of farmsteads, and the field patterns, the development and location of communal institutions in the new settlements when they emerged as separate communities.

The preliminary results of our research, and the study of literature on this subject have shown that there are many similarities in the colonization process over time and regions, but we also found some important features of heathland colonization typical for distinct phases and for the different territories and their administrations. A first phase includes the colonization on the heath commons during the 18th century promoted or directed by state institutions, and a second phase comprizes the settlement activities after partition of the commons in the early 19th century when private heath settlement was absolutely predominant while the state, if at all, concentrated its activities on the peatbog areas which were sole state property. A third phase begins at the end of the 19th century when by 'inner colonization' the governments tried to hold back the growing number of emigrants to the 'outer colonies' of America. My report is mainly based on research of my students carried out in Oldenburg and north Hannover.

During the first phase, in most of the territories the heath settlement promoted by the local administrations followed almost the same lines as centuries before: Individual applicants received a small heath plot on the fringe of the existing fields, but the new plot was not included into the open field with its strip pattern, but had to be enclosed separately by an earthen embankment to protect it from stray cattle. The new plots therefore tended to have a more compact block form. They were termed 'Kamp'. The new settler might construct his home close to the old settlement or on the plot which meant at some distance from the village. The new settlers in most cases came from the same village, they were sons of farmers not entitled to inheritance of the entailed estates (*Erbenhof*). As he was given only a bit of land, the new settler could only afford a cottage, and accordingly he was called 'Kötter' (cottager), and his small-holding 'Kötterstelle'. The small-holders formed a distinct social class below the old entailed estates. Generally, during some generations the 'Kötter'



were able to enlarge their small-holdings by further 'Kamp'-reclamation. The old farms also started to reclaim new land from the heath.

From the Middle Ages up to the middle of the 17th century, the increase of new small-holdings was slow and limited compared with later. In the county of Oldenburg on the average scarcely one had been added for each old farm though the count favoured the establishment of new holdings. 'Kamp'-reclamation by new peasants and for the extension of the old farms not only meant more fields but also more cattle and sheep, and both fields and animals depended to a large extent on the heath commons: the fields by extracting humus manure by stripping off the surface sod with a hoe, which was taken to the stables as litter and finally to the fields as manure. The heath area necessary to provide humus manure had to be several times larger than the arable land, the ratio depending on soil and vegetation quality. The moister parts of the heath served as common pasture for cattle, the drier parts for sheep.

It is quite obvious that an increase in the number and the size of holdings extracting humus and fodder from the heathlands would finally affect and destroy the balance of heath area on the one hand and fields and animals on the other. Therefore the farming communities became more and more adverse to admitting new small-holdings, and they tended to reduce their size in area and number of animals admitted to the commons. A new term 'Brinksitzer' came into use during the 16/17th centuries, meaning the cottar sitting on the 'Brink', that is the fringe of the village green close to the common pasture land, and this term seems to indicate the new class of very tiny small-holdings.

On the other hand, there was the growing number of rural population after the Thirty Years Wars, in want for some plot of land to grow food and fibre crops, and there were the absolutistic governments of the principalities which showed a growing interest in creating new homesteads for more tax payers. It were the ideas of mercantilism that the state should make the best use of all natural and human resources to improve the economy and the wealth of the nation which included the military force of the state. Wasteland to be converted into cropland, and landless and underemployed people to be made crop growers, spinners, weavers, day-labourers, and soldiers: these were such rural resources. Hence the administrations of the 18th century started to promote extensive small-peasant colonization of peatbogs and heathlands. They were assessed as 'wasteland' and as such claimed as state property, though for the farmers it was not at all wasteland but an essential part of their economy. Consequently a conflict arose: the rural communities tended to admit less new small-holders, and the governments promoted to settle more and more colonists, and this policy was fostered by the growing number of landless people. The state was in the stronger position and successfully exercised the right to admit new settlers by decreeing ordinances which left to the villagers only the right to use the commons. Frederic II of Prussia in 1764 decreed the 'Urbarmachungsedikt', an ordinance for wasteland reclamation for the province of Ostfriesland. The villagers were conceded the right to oppose to land distribution but in most cases they were not successful.

As the state authorities knew that they had also to protect the economic productivity of the old farms from which they drew most of the revenue, they kept the size of the new small-holdings in the heathlands very low, in Hannover about 1/3 ha; in the peatbogs which were less important for the old villages, the units were made larger, in Ostfriesland 1 to 2.5 ha, in the region east of Bremen more than 10 ha. The new settler, called 'Anbauer' or 'Kolonist' was expected to earn a good deal of his livelihood from day-labour and



home-industry which was strongly promoted by the mercantilistic policy of the states.

How was the colonization carried out? In Oldenburg, Ostfriesland, and during the first half of the 18th century also in Hannover, colonization was left to the local authority called 'Amt' which had no trained staff to carry it out in a planned manner, and which was not supplied with clear instructions from the government how to proceed. Hence, as in previous centuries the individual applicant was given a plot for house and garden or small field, selected and demarcated with crude methods by the deputy of the 'Amt' and the headman of the village to which the heathland belonged. In this way the additions of new small-holdings were more or less unregular and came into being 'drop by drop', as we may say, and the resulting settlement and field pattern is almost as irregular as in the 'Kamp'-settlements of former times. In Fig. 1 the irregular row of small-holdings in the northwestern part of the commons is an example of this way of colonization.

This unplanned way is quite surprising for the activities of an absolutistic state which as we know from other territories like Prussia and the Hungarian Danube territory of Austria, was able to colonize in a well planned manner. In our region the administration of the local level seems to have been somewhat underdeveloped during the early 18th century.

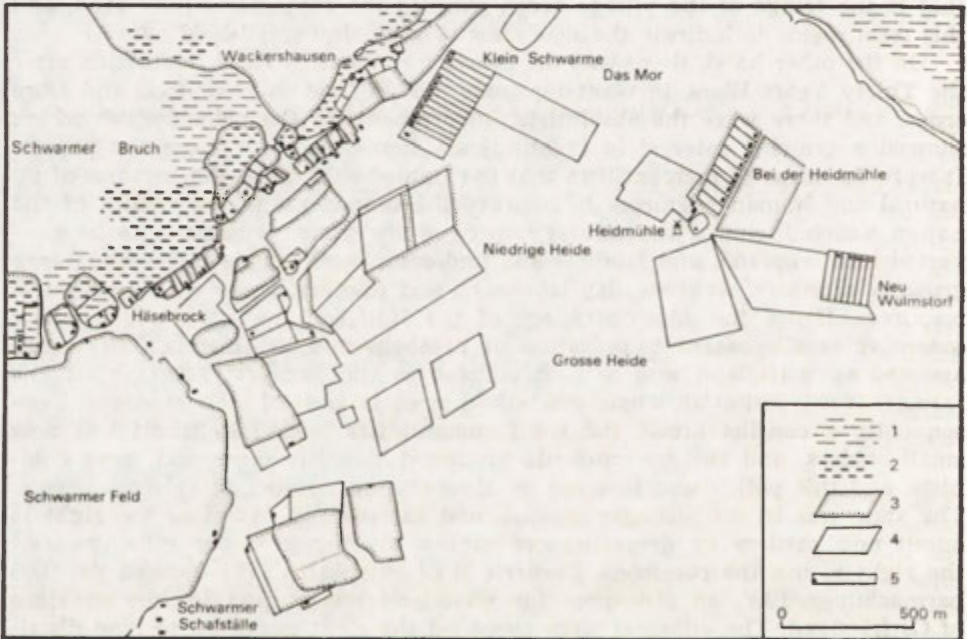


Fig. 1. A section of the heath commons of Schwarme and neighbouring villages about 1810 (situated about 25 km southeast of Bremen)

In the northwestern part of the map the irregular row of small-holdings on the fringe of heath and moist land ('Schwarmer Bruch') resulted from unplanned 'drop by drop' settlement before 1750. The rectangular 'colonies' like Klein-Schwarme or Neu Wulmstorf were planfully established by government authorities of Kur-Hannover after 1764. (The map is taken from the thesis of Rainer Cordes)

1 — unimproved meadows, 2 — improved meadows, 3 — enclosed fields, 4 — recently demarcated new fields not yet enclosed, 5 — colonist's holding

A change can be noticed in Hannover after the Seven Years War (1756–1763). The government was in urgent need of funds to fill up the treasury and pay debts. Hence the central administration gave orders to increase the extent of colonization very urgently, for two reasons: first, of course, to increase revenue, and secondly to settle veterans who were given a small-holding instead of a pension which saved the government much money. New soldiers were recruited by promising them a small-holding. Instructions by the central administration in Hannover were issued how the local authorities should proceed, and land-surveyors were engaged to lay out the new colonies. Ideas from Prussia, Denmark and England seem to have had an influence on this new settlement policy. In order to get rid of the quarrels with the village communities, their right of opposition to land distribution from the commons was more or less cancelled.

These new government activities resulted in a number of heath colonies with small-holdings of about 1/3 ha each, laid out very regularly in rows of about 15 rectangular units. In the heath commons of the village Schwarme and two adjoining villages about 65 new small-holdings were established from 1764 to 1790, clearly separated from the parent villages (Fig. 1). At present we are checking to which extent this planned type of heath colony was laid out in the various *Ämter* of Hannover. A parallel activity of the Hannover government was a quite extensive peatbog colonization east of the Weser.

The state settlement activities were retarded or even stopped during the Napoleonic wars. Soon after 1800 a new phase begins with the partitions of the commons by special reform laws. Only those villagers received a share who had the right of pasture and the duty of revenue and bondage obligations. Fixed heath land shares were distributed according to the revenue class of the



Fig. 2. A section of the former commons of the village Hatten (about 14 km southeast of Oldenburg)

Left: The situation after partition of the commons in 1828. Heavy black lines indicate the new field lanes. Right: Present situation as the result of individual settlement activities during the 19th and early 20th centuries. Dots indicate farms of different size, Sch = school. (Drawn after maps from G. Einemann, unpublished thesis, 1974)



farms. In Oldenburg the full-farm received from 20 to more than 35 ha, and the Brinksitzer as the lowest class 1/16 of the full-farm's portion. The surplus — if there was any — fell to the state. In some territories, e.g. in former Münster principality, the state got a fixed portion of 1/3 or 1/10 of the commons (*tertia marcalis*).

As the partition was carried out by trained staff, the resulting plot pattern was quite schematic (Fig. 2, left). The larger farms received several plots of different soil quality. The main idea behind the reform was to initiate a more intensive use of the heathlands by cultivation after turning them into private property. But this target could not be arrived at because those farmers who received the largest heath areas had no means to bring all of them under cultivation: artificial fertilizer was still unknown and new techniques like green manuring were not readily accepted by the conservatively minded peasants. They just continued their traditional farming system.

But according to the law of the partition of commons, the new owners of the heath plots were obliged to enclose them by earthen embankments within three years and pay land revenue after ten years. This proved to be a heavy burden for the farmers with the largest allotments who soon were ready to sell part of them to other villagers who were in want of land. Those were the so-called 'Heuerleute' and 'Einlieger' who had only hired a cottage or some rooms and a small field plot or a garden from a farmer who had also permitted them to keep on his account some sheep or one or two cows on the common pasture. As these villagers without land property had not been obliged to pay land revenue, they had been legally excluded from the allotment of heath plots, and now they were without pasture. As handicraftsmen, home-weavers and day-labourers these people could save some money to purchase a heath plot from the farmers who sold these plots which were situated far away from the village on the periphery of the community's territory. Within a few decades a quite large number of these land purchasers, among whom we also find 'Brinksitzer', moved their homes to their new holdings in the heathland on the periphery of the village territory. This movement resulted in the formation of dispersed groups of small farms in widely spaced rows along the strait new field lanes (Fig. 2). The pattern looks quite regularly like that of a planned colony. But in fact it resulted from numerous individual decisions. In many cases these small-holder groups, far away from the parent village, emerged into separate communities which were named after the parent village, with the suffix "-feld" added to it, which in Oldenburg, Ostfriesland and the Netherlands has the meaning of "heath", e.g., parent village Borbeck, daughter community Borbeckerfeld. In many cases the population of the daughter communities grew to 50 and more per cent of that of the parent community. In the case of Hatterwüsting (Fig. 2) which name means the former wasteland (*Wüsting*) of the parent village Hatten, the number of new settlers rose so much that two schools had to be built. Generally the daughter community remained a part of the parish of the parent village. In the community of Rastede (north of Oldenburg) the number of farmsteads before the partition of the commons was 115. In 1853 no less than 448 new small-holdings had been established!

From these sample studies it may have become evident that the small-holder settlement movement of the 18th and 19th century on the heathlands west of the Weser river promoted directly or indirectly by the state, has extended and changed the rural cultural landscape and its settlement fabric quite fundamentally. As I stressed earlier, I believe that this case is not a regional singularity, but similar developments took place in other European countries with wasteland



resources because the conditions were similar: population pressure, mercantilistic policy, and partition of the commons were general European features. What is needed is a co-operative approach of scholars from various countries to study this European settlement movement which seems to have been the last one in the history of the cultural landscape.

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Władysław Gomułka, 1905-1992, was a Polish politician and statesman. He served as the first secretary of the Polish United Workers' Party from 1956 to 1970. He is known for his role in the Polish October and for his leadership during the Polish People's Republic.

He was a member of the Polish People's Party and the Polish United Workers' Party. He was also a member of the Central Committee of the Polish United Workers' Party. He was a member of the Politburo of the Polish United Workers' Party.

He was a member of the Presidium of the Polish People's Republic. He was a member of the Council of Ministers of the Polish People's Republic. He was a member of the Council of State of the Polish People's Republic.

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CHANGES IN TRANSHUMANCE IN THE CENTRAL APENNINES:  
THE 'PIANI' OF CICOLANO

LUIGI V. PATELLA

The aim of this brief paper is to examine the characteristics of the karst complex which, incorporating the four main basins, occupies the highest part of the Cicolano Mts. The physical features of the district and the structure of Man's temporary utilization of the area have determined the rise of its typically rural landscape. Here the particular types of agro-pastoral economy, which date back at least to the Classical Age, have survived through the Middle Ages right up to modern times and are still practised today. Though this kind of economy is not unusual in the higher part of the Apennines, in other districts it has undergone such transformation that its specific socio-economic functions have been completely altered.

The area, locally known as the 'Cicolano', covers about 446 km<sup>2</sup> and consists of four Communes (Fiamignano, Petrella Salto, Borgo Rose, Pescorocchiano). Formerly it belonged to the Province of Aquila, but in 1927, for administrative reasons, it was joined to the Province of Rieti, newly constituted in the Region of Latium. The mountainous basin of the river Salto, which is the left tributary of the river Velino, embraces the whole area of Cicolano. When communication patterns are compared with those of the Rieti district and Marsica, it can be seen that the area is almost isolated. For this reason and because of the area's sparse population, the landscape has maintained almost intact, both from the human and natural points of view, those particular features which distinguish it from the adjoining areas. The name of the district, undoubtedly derived from 'Equicoli' indicating the Italic tribe 'Equi' conquered by the Romans in 304 B.C., was still in use during the Middle Ages and has survived through the succeeding centuries. The dispersed settlement is still virtually nonexistent and the inhabitants live in a large number of scattered hamlets, locally known as 'ville', which are situated between 600 m and 1000 m a.s.l. on the right slope of the river Salto. Woods, consisting of densely grown copses and beeches, cover the higher slopes of the mountain ranges and impart to the harsh landscape a sylvan aspect which, except for the artificial lake on the valley floor, must have been similar to that described by Virgil.

The area examined in this paper extends 56 km<sup>2</sup> above the contour line of 1200 m and is part of one of the largest uninhabited areas of Central Italy. It includes the highest part of the anticline of Mt. Nuria-Monte della Duchessa which towards north-east marks the boundary of the syncline of the Cicolano Valley. From the administrative point of view the entire territory is included into the Communes of Petrella Salto and of Fiamignano. That is, the enclosed karst basins of Cornino, Rascino and about half of the basin of Aquilente are situated within the municipal territory of Fiamignano, while the





is separated from the Terminillo mountain group by the gorge of Antrodoco. The ancient rocks of these reliefs, which were formed before the Tertiary age, are heavily eroded and pitted with a large variety of karst cavities; surface water is lacking but there is an abundant flow of underground water.

The basin floors, formerly ancient lakes, consist of sandy and clayey alluvial sediments accumulated there during the late Quaternary age, and of vast patches of red earth. From these emerge some small and marginal 'hum' which represent the calcareous outcroppings embedded between fractures; these are particularly evident east of Lake Rascino. The highest plain, which is the one of Cornino (about 1280 m), is scattered with numerous alluvial saucers. In its lowest part, at about 1261 m a.s.l. there is the small homonymous lake (about 1.5 ha large and 80 cm deep, according to the measurements taken in the summers of 1974 and 1975) — it is kidney-shaped and subject to considerable level variation as it is fed mainly by meteoric waters.

Some useful information concerning the climatic conditions of Cicolano given by R. Riccardi may, with suitable altimetric corrections, still be considered valid. However, it is important to remember that the area described here has not yet been equipped with thermo-pluviometric stations. But the maps published by the 'Servizio Idrografico' have been of great help and the data thus obtained has been compared with that provided by the nearby observation stations. Thus it has been possible to establish approximate values of mean annual temperature — about 7.5°, and of mean annual precipitation — about 1150 mm. The climate of the area could be described as 'cool temperate'.

The underground water flow is rather intense and the meteoric waters, of which only a small amount remain *in loco*, are rapidly absorbed.

In the highest massif which includes Mt. Nuria (1888 m) and Mt. Nurietta (1884 m) is the upper limit of arboreal vegetation at about 1750 m. Above<sup>1</sup> this limit the peaks are rounded and covered with alpine pastures. Lower down, the forest line is about 30–40 m above the level of the plains and there, on the shady slopes of the detrital piedmont belt, Man has striven to win patches of soil for cultivation. These slopes are covered with tall, densely grown beeches which lower down open onto grassy pastures. On the plains or where the countryside is less steep, large and low alluvial fans occupy the areas corresponding to the principal faults. Here the soils are autochthonous, shallow, the red earth type, and always acid. The entire plain of Cornino and the outer margins of the plains of Rascino, Aquilente and Lasca are covered with a compact mantle of herbaceous vegetation. The central parts of these last three plains are generally slightly hollow with darker and deeper soils which are richer in organic material.

The succession of human settlements in the Cicolano district has already been studied in detail but, as far as the specific area described here goes, information is far less satisfactory. As said before, at present there are no permanent settlements in the area. This was not so in the past, and when taking into consideration the situation past and present in the rest of the region, it can be deduced that the higher lying areas were utilized and permanently inhabited in ancient times; certainly much before 1083, the year in which a document mentions 'Rasino' for the first time. In 1306 the name appeared again in

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<sup>1</sup> Apparently it is a limit determined by Man to utilize the higher lying areas for pasturing; even at present it is not unusual to see horses and cattle grazing these upper clearings. The same is also true for the lower limit, determined by the expansion of pastures and cultivated land above the valley floor and along the edges of the basins.



*Regesti Angoini* and in 1347, as we are told, the troops of Louis, king of Hungary destroyed the castle of Rasino.

At the foot of the hill where the castle once stood, there was a small village grouped around the church of S. Maria. The ruins of the external walls of some buildings can still be seen. In the following centuries the village came to be called Rocca Santamaria and, presumably, enjoyed a certain demographic stability—the number of 'fuochi' continued to increase till the end of the

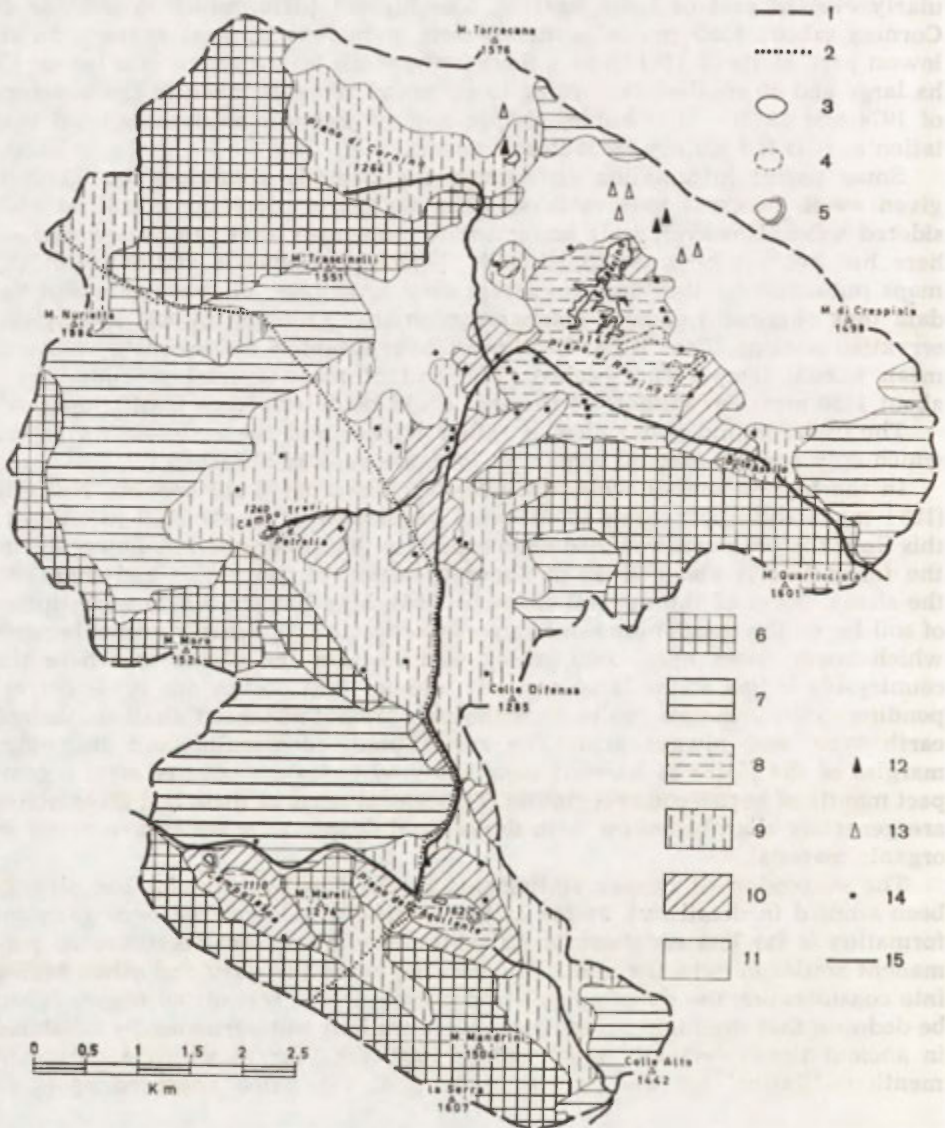


Fig. 2. General land use map of the 'Piani', Cicolano

1—drainage area boundaries, 2—communes boundaries, 3—lakes, 4—dry lakes, 5—embanked lakes, 6—dense forests, 7—open forests, 8—hay-growing meadows, 9—pastures and meadows, 10—cultivable area, 11—rocky slopes with scant grass, 12—dense afforested area, 13—degraded afforested area, 14—stone houses, 15—main roads



first half of the 16th century and then, by the end of the 17th century, decreased by one third. There is no documentary evidence indicating exactly when this village was abandoned, but it probably happened in the second half of the 18th century, coinciding with the strong population decrease recorded in Sabina and in the higher parts of the Apennines between 1782 and 1816. After this period of progressive depopulation, in the area described here the following century witnessed only the presence of temporary settlements for the exploitation of pastures and forests.

On the very restricted areas of private property there appeared stone buildings as a result of sheep-rearing activities. The particular feature of these buildings was a stone wall, about 2.50 m high, delimiting an enclosure which protects sheep from wolves during the night. Most of these buildings date back to the period between the end of the 19th century and the beginning of the 20th when transhumance from winter pastures in the Campagna Romana was at its peak. Then, owing to the measures taken by the Agrarian Reform, which opened up for cultivation the vast 'sodi' formerly used as winter pastures, transhumance declined and between 1940-1960 most of the buildings fell into ruin. However, it is interesting to note that at present these buildings are being repaired and restored. So, while small flocks of about 10-20 sheep belonging to mountain small-holders have almost entirely disappeared, there is a considerable increase of medium sized flocks (generally under family management) and, even more, of large flocks consisting of about 1000 sheep. Long and short distance vertical transhumance is now taking advantage of the present agricultural crisis which implies reduced cultivation as a direct consequence of rural depopulation appearing even in the most fertile areas of the Rieti and Viterbo districts, of the Campagna Romana, and of the Agro Pontino. Over the last few years there has been a general revival of sheep-rearing and that is also characteristic for the mountains of the Cicolano near the border of the Province of Aquila. As the road network has been improved, shepherds may now reach their pastures by car and return home in the evening, the sheep remain in the so-called 'stazzi' and are tended by sheep dogs. Thus the isolation of these plains has been overcome and the shepherds' way of life has acquired a new, more human dimension. In this context it is also to be noted that the buildings, once the isolated and chaotic shelters for people and animals, are now functional structures for dairying, storage, small-scale pig and poultry raising, and sometimes, for short periods of rest for the whole family.

Of great economic importance<sup>2</sup> for the Communes of Petrella and Fiamignano is livestock raising which may be based either on transhumance (sheep and goats) or stalling (cattle and horses). According to the records of the 'fida pascolo' (a kind of grazing tax) for the year 1974, the number of sheep in both Communes was over 18,000 (2000 of which were local), and the number of cattle was almost 700 (only 40 were transhumant) while the number of horses was just over 300 (25 were transhumant). The 45 flocks winter mainly in the Provinces of Rome and of Latina; only 3 or 4 pass the winter in the Province

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<sup>2</sup> Most of the land, including almost the entire mountain area as well as past feudal territory, is now part of municipal property (62% at Fiamignano and 43% at Petrella Salto) and is subject to civic woodcutting and pasturing rights. In the past, when pasturing and timbering activities were more developed and consequently, the danger of overgrazing was greater, either the Commune itself or the 'universities' (corporations) and the villages owning land, 'put the mountain up to auction' in March. At present timber is not in great demand partly because of the severe protective measures imposed by the Forestry Department and thus represents a minor item of the municipal budgets.

of Rieti: at Passo Corese, S. Giovanni Reatino and Cittáducale. The winter pastures for small flocks of local sheep occupy the lower slopes of the municipal area itself and as early as April the sheep are moved onto the mountains where they stay till the first snowfalls in November. Much more complex is transhumant sheep-raising: towards the middle of June special trucks take the flocks up the mountains where permanent pastures are grazed first. Only after hay-making may they graze down meadows. After the middle of August pregnant ewes are taken down to the pastures of the Piana Reatina. Here they stay till about the end of October, when they are joined by the rest of the flock and transferred to pastures on the plain. During the period in the mountains only one shepherd, aided by specially trained dogs, is needed to tend about 200-300 sheep and to take them to water at the lakes of Rascino, Petrella and Aquilente. Every morning and every evening help comes up from the valley to do the milking (about 150 head each) and to take down cheese and 'ricotta' made during the day. On the plain of Cornino — the only plain where the cattle and horses of Petrella and Fiamignano are allowed to graze — animals graze freely and reach the upper pastures through the beech-woods. Herdsmen go up only every 2-3 days to check the herds and to send them to the small, boggy Lake Cornino to water. The animals return spontaneously to winter stalling — at the beginning of the cold season they move down to the plain and then, before the first snowfalls, set out along sheep and mule tracks for their homes.

From what has been said before, it is clear that both transhumant and stalled livestock raising is perfectly adapted into what may be considered the natural Cicolano environment. Moreover, as the livestock population is still below its potential capacity, it may be postulated that, if the economic validity of this type of economic activity is recognized, there is a wide range of possibilities for further development. Apart from taking into account the obviously important social function of improvements made in plant and animal genetics and also in the field of structures, on a co-operative basis, or infra-structures (roads, aqueducts etc.), we think it important to give a brief account of the economic aspects of livestock raising.

As regards the summer pasturing of local cattle and horses which grazing freely do not impose costs for tending, the advantages derive from savings on fodder and from more leisure time to dedicate to productive sideline enterprises enjoyed by most smallholders. On the other hand, a minor quantitative production is largely offset by the qualitative improvements of milk and meat. At the same time the high hay yield from the hay meadows of the plains assures excellent forage for winter stall feeding. This is also true for the small flocks of local sheep, whereas for transhumant animals the situation is much more complex. First of all it is necessary to single out all the elements which compose this specific kind of pastoral organization ('armentari', 'affidanti' and 'affidanti a staglio', 'moscetti', shepherds) and differentiate their often multiple functional participation in the global productive process, which quite obviously, may lead to different profits.

The 'armentario' is a particular type of 'agriculturist' still surviving in the Cicolano district. He has vast pecuniary resources, takes care of flocks of about 2500-3000 and usually owns pastures in the Campagna Romana. His own sheep (over 1000-1500) are joined by smaller flocks (100-200) entrusted to him by those sheep-owners who have no winter pastures of their own. There are two types of 'affida' — the simpler one being when, between September and May, the 'armentario' undertakes all tending and raising expenses. He pays the owner about 15,000-20,000 lire a head and gives back a quarter of the lambs born during winter. The second kind is the 'affida a staglio', which means that



during the period of pasturage on the plain, the sheep-owner himself works as a shepherd for the 'armentario' who is responsible for all expenses. He pays his shepherd-owner monthly wages of about 180,000 lire, as well as a certain amount for each head entrusted to him. The owner has also the right to receive produced goods to the value of 15,000–20,000 lire a month and a quarter of the lambs born during this period. The 'moscetti' or 'vagantini' are owners of small flocks (50–150 head) but they own no pastures on the plain. Therefore during winter they shift continually to land leased separately each time. These shepherd-owners sell their products directly (milk, cheese, 'ricotta', lambs, wool) and pay their rent in kind.

The very small flocks (15–20 head), generally stalled and tended by family members themselves, are gathered together at the beginning of spring and moved up to mountain pastures (especially to Colle Difesa) where they stay till about the middle of November; the sheep are herded by each individual owner. It is interesting to note that the relationship between the 'armentari', the owners of flocks and of land, the 'moscetti' etc. is regulated by ancient traditions. All contracts are based on a 'gentlemen's agreement' and are strictly observed. Though it may seem almost anachronistic today, it does represent an important cultural heritage which illustrates a way of life based on mutual trust and respect and characterizes this isolated district not yet destroyed by the impact of the consumer society.

It has been estimated, though very approximately, that transhumant sheep rearing yields a net profit of about 35,000 lire per year for each adult. This is in practice the amount gained by the 'armentario' having sheep of his own. The profit decreases by about 10,000 lire for sheep entrusted to him 'a staglio' and for pasturing those belonging to others. The profit made by the 'moscetti' is about the same because a minor income (rougher pastures and long and difficult tracking) is counterbalanced by the absence of tending and transport costs. The profit of the 'affidanti a staglio' is about 25,000 lire, while the simple 'affidanti' make no more than 20,000 lire. As for the shepherds, who are sometimes recruited abroad as local labour is often lacking, they earn a monthly wage of about 200–220,000 lire in cash and in goods produced.

Therefore, it is easy to see that, in spite of the possible economic difficulties, transhumant sheep raising is still a remunerative activity not only for the owner of large flocks, but also for the small owner. Furthermore, the so-called 'universities', which together with the Communes themselves own mountain pastures, derive a certain income by collecting the 'fida pascolo'. This is particularly important, especially if one considers that this type of pastoral activity, handed down almost intact through the centuries, has still maintained its precise and justifiable social function. It also shows the efficiency of the basic structures of organization (territorial vocation, validity of pastoral tradition, reliability of stock-raising farms, individual enterprise, as well as the integration of agro-pastoral activity and productive activity in other branches)<sup>3</sup> and of intelligent utilization of the advantages offered by modern civilization, such as roads and means of transport for man and animals. What is really important in Cicolano — and particularly in the area described here — is that the traditional way of life has not been alienated by hasty and indiscriminate

<sup>3</sup> Quite frequently workers, clerks, teachers etc.; own small flocks and dedicate their leisure time to sheep raising. This kind of activity has long periods of standstill, especially during winter transhumance, and, as it also involves the entire family, for the rest of the year it is compatible with the owner's principal occupation. Moreover, mutual aid and collaboration are still deeply felt and counteract the negative effects of exclusively part-time activities.



acquisition of new socio-economic models. On the contrary, by recognizing the cultural heritage expressed in preexisting structures and by turning to profit the positive aspects of progress and by rejecting those which are more specifically consumptive, it has been possible to improve and to adapt them to the new reality.<sup>4</sup> When taking into account only the data concerning the population decrease, it may seem that the district in question is highly underdeveloped. In fact the situation is quite different because the area, though strongly reflecting the current structural crisis which the whole country is undergoing, has succeeded in maintaining its own specific characteristics based on a centuries-old environmental equilibrium. Therefore, the area we have just described represents an interesting example of rural landscape still thriving on the combined action of Man and Nature.

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<sup>4</sup> At the moment there are a number of projects to exploit the district for second homes and tourist residences. The only way to exploit the natural environment is to restore the ancient centres to Man's living purposes, to encourage sports (fishing, hiking, nature watching, etc.) and to create well-equipped camping sites (near the lakes, on the mountains, etc.).

## BIENS COMMUNAUX ET DÉSEXTIONS RURALES

JEAN PELTRE

On sait que les biens communaux sont parfois l'héritage de désertions rurales<sup>1</sup>. A partir de l'exemple de la Lorraine où le dépistage des nombreux villages disparus — encore très imparfait — pourrait être grandement facilité par cette voie de recherche, nous nous proposons d'en préciser ici quelques modalités.

Par biens communaux nous entendons à la fois les forêts et les espaces non boisés, cultivés ou non, habituellement dénommés "communaux" et utilisés collectivement par les habitants d'un village. Le rôle de ces espaces non boisés, de ces terres "vaines et vagues", dans l'ancien système d'exploitation communautaire, a été maintes fois souligné. Il était essentiel au printemps, époque la moins favorable à l'élevage, durant les "9 semaines"<sup>2</sup> où les prés se fermaient aux animaux dans l'attente de la première fenaison. Les réserves de fourrage étaient alors épuisées et les terres arables, bouleversées par le labour ou ensemencées, ne permettaient plus le parcours du bétail.

L'analyse statistique rend compte de l'importance spatiale des biens communaux dans le passé comme dans le présent, bien que leur rôle ne soit plus comparable à celui d'autrefois. Cette analyse puise à différentes sources, de valeur inégale. La plus récente d'entre elles, extraite du Recensement général de l'Agriculture de 1970<sup>3</sup>, enregistre nécessairement les fluctuations consécutives aux remembrements parcellaires des cinquante dernières années. Ceux-ci toutefois, s'ils bouleversent souvent la répartition géographique des "communaux" à l'intérieur du finage, n'affectent pas sensiblement la part respective des différentes catégories de biens communaux non plus que leur surface totale. Il n'est donc pas exclu qu'une concordance puisse être observée entre leur extension en 1970 et en 1700, date d'une Enquête générale sur les biens des

<sup>1</sup> Voir, par exemple, pour l'Allemagne: H. Grees, *Die Auswirkung von Wüstungsvorgängen auf die überdauernden Siedlungen. Beiträge zur Genese der Siedlungs- und Agrarlandschaft in Europa*, Wiesbaden 1968, p. 50-66, Bibliographie. — Pour l'Alsace: A. Humm, *Villages et hameaux disparus en Basse Alsace. Contribution à l'histoire de l'habitat rural (XII-XVIIIe siècles)*, Strasbourg 1971, Publ. Soc. Sav. Alsace et Régions Est, Col. "Recherches et Documents", VII.

<sup>2</sup> En réalité treize ou quatorze, en dépit de l'expression consacrée par l'usage (de la fin mars au commencement de juillet). Cf. M. Lacoste, *Le partage des communaux sur le territoire du département de la Meurthe avant la loi du 10 juin 1793*, Berger Levraut, Nancy 1954, p. 1.

<sup>3</sup> *Recensement Général de l'Agriculture, 1970, Enquêtes communales*; tableau IV: Répartition de la superficie cadastrée des communes selon le propriétaire; tableau V: Propriétés de la commune. Voir aussi les "tableaux de totalisations" IV et V pour le récolement de tous les biens communaux par régions agricoles, cantons et départements. Ces tableaux sont réunis dans les quatre fascicules départementaux de la Région Lorraine: Meurthe et Moselle, Meuse, Moselle, Vosages.

TABLEAU 1. Biens communaux et domaniaux en Lorraine (en valeur relative<sup>1</sup> par rapport à la surface totale)

Circonscriptions	Forêts domaniales	Forêts communales	Landes, friches prairies, pâturages communaux	Total des biens communaux
<i>Meurthe et Moselle</i>				
1 Ensemble du département	6	12	5	17
2 Cantons ruraux les mieux pourvus				
Colombey-les-Belles	5	27	5	32
Toul-Sud	3	28	4	32
Toul-Nord	3	25	4	29
3 Cantons ruraux mal pourvus				
Arracourt	11	2	2	4
<i>Meuse</i>				
1	8	16	1	17
2 Vaucouleurs	3	25	4	29
3 Triaucourt	14	3	1	4
Charny-sur-Meuse	43	3	2	5
<i>Moselle</i>				
1	12	7	3	11 <sup>2</sup>
2 Metzervisse	2	13		20
3 Réchicourt	12	1		2
Sarrebourg	26	2		2
Bitche	55	2		3
<i>Vosges</i>				
1	10	17		21
2 Provenchères	12	24	6	33
Saulxures-sur-Moselotte	12	30	21	55
3 Senones	25	10		11

<sup>1</sup> Les pourcentages sont arrondis.

<sup>2</sup> Y compris les terres, surfaces bâties, chemins etc ...

Communautés dans le Duché de Lorraine<sup>4</sup>. Cette concordance reste approximative en raison de l'imprécision des anciennes mesures agraires. Elle n'en est pas moins étonnante, si l'on tient compte des aliénations consenties durant la guerre de 30 ans par des communautés appauvries et des partages de communaux réalisés depuis la seconde moitié du 18<sup>e</sup> siècle. On pourrait objecter que de telles corrélations sont purement accidentelles. Leur fréquence prouve qu'il n'en est rien (Fig. 1 à la fin de ce volume), que les aliénations du 17<sup>e</sup> siècle ont souvent été définitives en dépit des intentions des pouvoirs publics<sup>5</sup> et que les partages de communaux, activement prônés dès la fin de l'Ancien régime, n'ont pas été systématiquement réalisés ici, à la différence d'autres régions européennes<sup>6</sup>. Lorsque les partages ont eu lieu, ils ont souvent été assez tardifs,

<sup>4</sup> *Déclarations des Communautés de 1700*, Archives Départementales de Meurthe et Moselle, B. 11 716 à B. 11 719. On trouvera plusieurs cas de concordance pour la région de Nancy sur la Fig. 1.

<sup>5</sup> Avant la seconde moitié du 18<sup>e</sup> siècle, les ducs de Lorraine et la monarchie française, maîtresse des Evêchés de Toul, Metz et Verdun depuis 1552, avaient constamment cherché à préserver l'intégrité des biens communaux. C'est dans cet esprit que le duc Léopold avait lancé l'enquête de 1700.

<sup>6</sup> Ainsi en Allemagne du Nord-Ouest où les conséquences des partages sur les paysages ruraux ont été fort sensibles. Cf. H. Jaeger, *Die Allmendteilungen in Nord-westdeutschland in ihrer Bedeutung für die Genese der Gegenwärtigen Landschaften*, *Geografiska Annaler*, 43, 1961, p. 138-150, Bibliographie.



postérieurs aux documents cadastraux des premières décennies du 19<sup>e</sup> siècle qui gardent ainsi toute leur valeur pour l'étude des communaux dans leur situation ancienne.

La carte (Fig. 1) et le Tableau 1 permettent de saisir quelques facteurs de répartition des biens communaux et de préciser leur importance respective. Les facteurs physiques commandent, semble-t-il, les forts pourcentages des Hautes Vosges cristallines (cantons de Provençères sur Fave, de Saulxures sur Moselotte), des revers de cuestas calcaires de Meuse et de Moselle favorables à la forêt et à la friche (Fig. 2) (cantons de Neufchâteau, Vaucouleurs, Colombey les Belles), des plateaux gréseux au sol pauvre (secteur de La Vôge, canton de Bruyères etc...). Dans tous les cas, les communes sont de grandes dimensions. On pourrait donc y voir une cause essentielle de l'importance relative des communaux. En fait, il n'y a pas de rapport systématique entre ces deux données: nombreuses sont les petites communes où la proportion des communaux dépasse les pourcentages moyens<sup>7</sup>.

Un certain déterminisme physique est indéniable mais il interfère largement avec des facteurs humains. On le vérifie d'abord au niveau des faibles densités de biens communaux. Ces mêmes plateaux gréseux du glacis vosgien, précédemment cités, présentent aux environs de Sarrebourg, Phalsbourg, Dabo et Bitche les pourcentages les plus faibles de la Lorraine (Fig. 1 et Tableau 1) qu'il s'agisse ou non de forêts. Il est vrai que cette médiocrité est compensée, çà et là, par un spectaculaire développement des forêts domaniales dans lesquelles les habitants jouissaient de droits d'usage fort importants<sup>8</sup>. Mais les forêts domaniales, absentes de nombreux secteurs, ne peuvent fournir d'explication générale satisfaisante. Les causes essentielles de l'absence ou de l'insignifiance des biens communaux dans ces contrées sont certainement l'ampleur et la précocité des partages, réclamés à cor et à cri et réalisés sur ces terroirs pauvres dès la fin de l'Ancien régime<sup>9</sup>.

Une autre cause, ponctuelle cette fois mais souvent vérifiée dans ces mêmes régions gréseuses, est la création tardive de certains villages<sup>10</sup>. Dès l'origine, ils furent privés de communaux, leurs chartes d'établissement des 16<sup>e</sup>, 17<sup>e</sup> ou 18<sup>e</sup> siècles n'y faisant aucune allusion, peut-être en raison de l'exiguïté du territoire attribué à chacun d'eux<sup>11</sup>.

Les facteurs humains contribuent aussi dans certaines conditions à gonfler le patrimoine foncier des communes, notamment en cas de désertion rurale. Selon H. Grees<sup>12</sup>, l'une des possibilités d'utilisation d'un finage déserté est son insertion dans les biens communaux d'un ou plusieurs villages subsistants. Cette insertion étant facilitée par la situation marginale des terres vacantes par rapport aux finages vivants. Se référant à H. Jänichen, il constate que beaucoup

<sup>7</sup> Ainsi à Dornot (département de la Moselle), village de l'ancien vignoble messin: 43 ha sur 104 au total, soit 41%. (Le pourcentage départemental de la Moselle étant de 11%).

<sup>8</sup> A Dabo (Moselle — canton de Phalsbourg): 4000 ha de forêt domaniale, pas de communaux. Nombreux exemples dans les cantons de Bitche et Phalsbourg.

<sup>9</sup> Après avoir promulgué en 1769 un édit sur le partage des communaux dans les Trois Evêchés (Metz, Toul, Verdun), le Roi de France régla en 1771 le partage de ceux de Lorraine et Barrois.

<sup>10</sup> Exemples: en Moselle — St François Lacroix, Willerwald, St Bernard, St Hubert, Neufvillage, Henridorff, St Louis, Bickenholz, Brouderdorf, Diane Capelle; en Meurthe et Moselle — Viéville en Haye. Cf. Fig. 1.

<sup>11</sup> J. Peltre, Du XVI<sup>e</sup> au XVIII<sup>e</sup> siècle, une génération de nouveaux villages en Lorraine, *Rev. Géogr. Est.*, 1-2, 1966, p. 3-27. Certaines créations empiétaient même sur les biens des communautés riveraines.

<sup>12</sup> *Op. cit.*, p. 64.

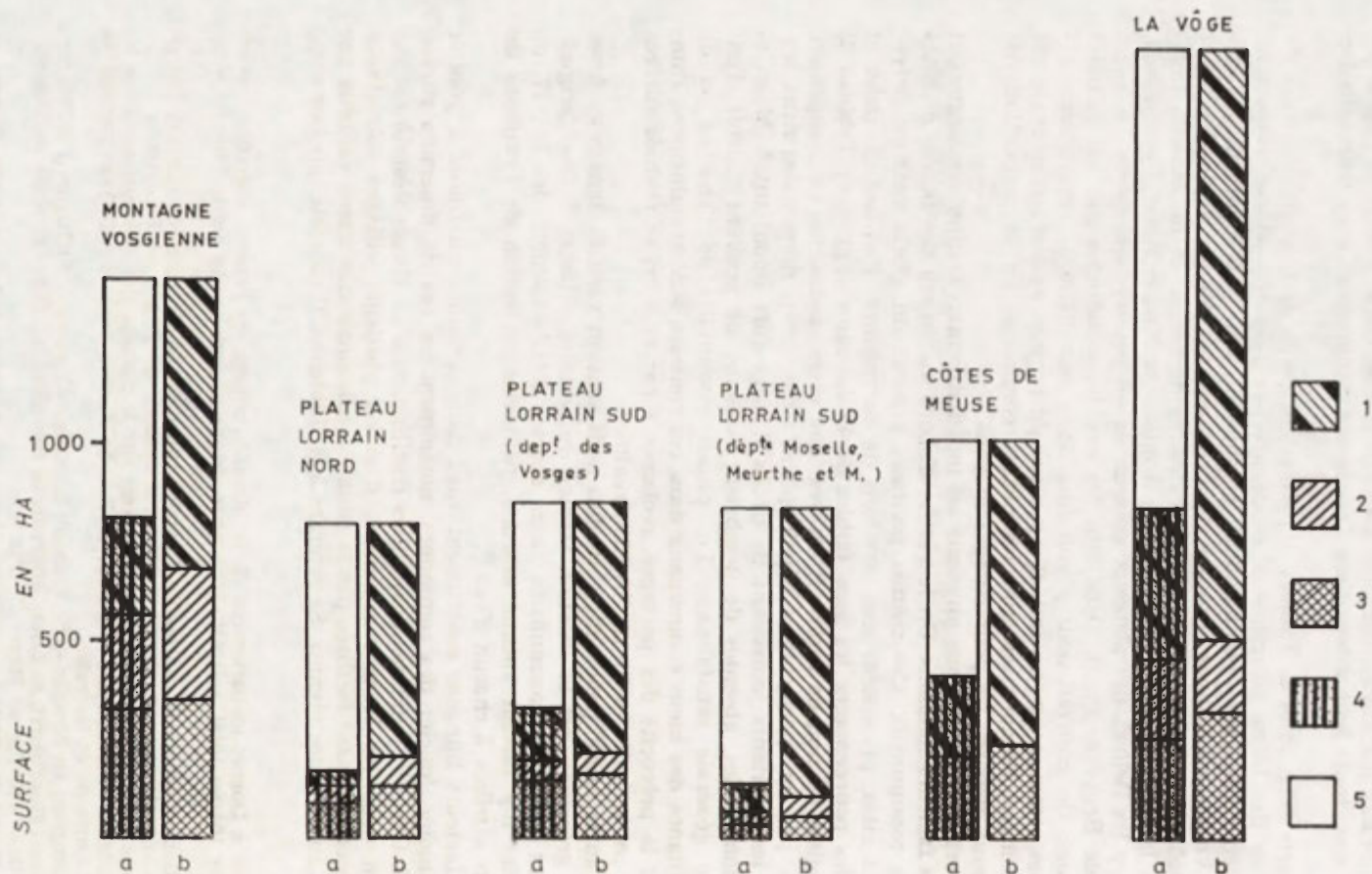


Fig. 2. Répartition de la propriété foncière et forestière dans la commune-type des principales régions agricoles  
 1 — propriété privée, 2 — propriété d'Etat, 3 — propriété communale, 4 — bois et forêts, 5 — terres, prés, friches; a — propriété forestière, b — propriété foncière



de villages d'Allemagne n'ont connu leurs contours actuels qu'après les acquisitions de biens communaux consécutives aux désertions du Bas Moyen-Age.

Les mêmes observations ont été faites en Basse Alsace par A. Humm<sup>13</sup>. "Parallèlement à la concentration de l'habitat rural s'effectua le groupement progressif des finages... Un certain nombre de finages annexés par une commune voisine étaient exploités entièrement ou partiellement en tant que communaux. Certaines de ces terres devaient être les anciens communaux du village disparu. Dans plusieurs cas, le seigneur les a confisquées en tant que terres devenues *caduques*. Ailleurs le seigneur les abandonnait à la communauté qui exploitait le reste du finage..."

En Lorraine, de semblables corrélations sont difficiles à mettre en évidence. Une carte juxtaposant les désertions et les fortes densités de biens communaux n'a rien d'éloquent (Fig. 1). Les communes bien pourvues ne s'ordonnent pas en fonction des disparitions de villages actuellement connues. Au contraire, celles-ci coïncident parfois avec des pourcentages très faibles. Cela tient en partie aux lacunes et aux imperfections de nos recensements des désertions. Mais une autre cause importante est liée à l'âge de celles-ci: *les désertions tardives n'engendrant pas un gonflement spectaculaire* des propriétés collectives des communes héritières. Les exemples précis sont multiples de villages héritiers de localités abandonnées pendant la guerre de 30 ans ou dans les décennies suivantes et qui, dès le 18<sup>e</sup> siècle, étaient dépourvus de communaux<sup>14</sup> ou peu s'en faut.

Le cas de Dommartin aux Fours nous semble très représentatif. Il s'agit d'une communauté installée sur le revers de la côte de Meuse où se déployait la majeure partie de son finage en terre et bois. S'y ajoutaient des prairies au fond du val de Meuse et un vignoble accroché au versant concave du méandre (Fig. 3). Les dénombremments permettent de situer l'époque de la disparition entre 1641 et 1649 et de préciser l'importance de la population et son évolution. Le nombre des "conduits"<sup>15</sup>, de 45 en 1585, était tombé à 26 en 1625, dès avant les guerres, et à 20 en 1640<sup>16</sup>. Les seigneurs de Dommartin, chanoines du Chapitre de la Cathédrale de Toul, s'efforcèrent de préserver l'avenir de la localité durant de longues années. En 1660, ils installeront un "curateur aux abandons" pour "prendre garde qu'on ne démolisse le village et qu'on ne dégrade les bois". Finalement, c'est au 18<sup>e</sup> siècle que le finage tout entier sera joint à celui du village le plus proche. Troussey se trouvera désormais au centre d'un territoire exceptionnellement vaste pour cette région: 1635 ha, mais rien ne le distingue aujourd'hui sur la statistique des biens communaux: 297 ha seulement, 18% de la surface totale, la moyenne départementale meusienne étant de 17%.

Parmi ces biens communaux, seuls les près et les bois sont distribués en vastes parcelles, sans aucune préférence pour l'ancien finage déserté (Fig. 3) non plus que les terres arables, éparpillées en minces lanières. Troussey a simplement hérité des anciens communaux de Dommartin sans même les accroître aux dépens de l'assiette du village détruit. Cela tient aux causes et aux modalités de la disparition. Dès avant les guerres, la communauté de Dommartin était lourdement endettée. La tourmente passée, si les habitants avaient réintégré leurs anciennes demeures, ils auraient repris à leur compte la totalité

<sup>13</sup> A. Humm, ouvr. cité, p. 57 et 68.

<sup>14</sup> Citons par exemple: Nitting, Gunzwiller, Aulnois, Fossieux dans le département de la Moselle, Malzey en Meurthe et Moselle etc...

<sup>15</sup> Ou ménages.

<sup>16</sup> Archives départementales de Meurthe et Moselle: G. 20 et renseignement de G. Cabourdin.



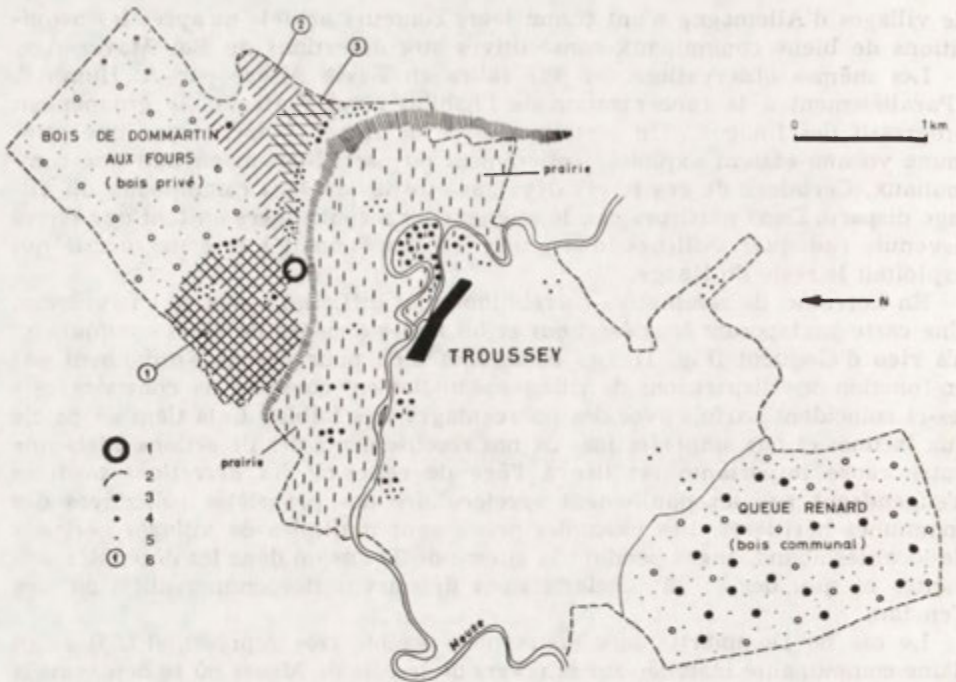


Fig. 3. Biens communaux et désertion tardive à Troussey (Meuse)

1 — emplacement de Dommartin aux Fours, village déserté au XVII<sup>e</sup> siècle, 2 — limites actuelles du finage de Troussey. — Localisation et superficie des biens communaux de Troussey: 3 — 10 ha, 4 — 1 ha, 5 — 10 ares. — 6 — anciennes saisons de Dommartin

des dettes anciennes imputées à la collectivité. Réfugiés dans les villages périphériques, ils s'y installèrent définitivement tout en gardant leurs propriétés à Dommartin. Périodiquement — nous en avons le témoignage à partir de 1670<sup>17</sup> — un appel leur était adressé pour faire la déclaration de "reprise" de leurs terres. Si bien que, hormis les anciens "communaux", il n'y eut guère de déshérences véritables à Dommartin dont les seigneurs d'abord, la communauté de Troussey ensuite, purent bénéficier.

Un autre élément d'explication est peut être le fait qu'au début du 18<sup>e</sup> siècle, lorsque les territoires de Troussey et de Dommartin furent intégrés dans un même ensemble<sup>18</sup>, les communaux n'étaient plus unanimement appréciés. Il n'y avait pas encore contre eux d'offensive à outrance mais des partages avaient déjà eu lieu çà et là<sup>19</sup>.

Cet exemple n'est pas rare. En général, les villages héritiers de finages désertés tardivement ne se distinguent ni par l'ampleur ni par la concentration de leurs communaux. L'analyse de ceux-ci, tant sur le plan statistique que géographique, ne peut être d'aucun secours pour la détection et la localisation précise des abandons définitifs du 17<sup>e</sup> siècle.

<sup>17</sup> Archives départementales de Meurthe et Moselle, G. 20.

<sup>18</sup> C'est au début du 18<sup>e</sup> siècle que les anciennes saisons de Dommartin furent intégrées dans celles de Troussey. Archives départementales de Meurthe et Moselle, G. 1346.

<sup>19</sup> M. Lacoste, *op. cit.*, p. 3.

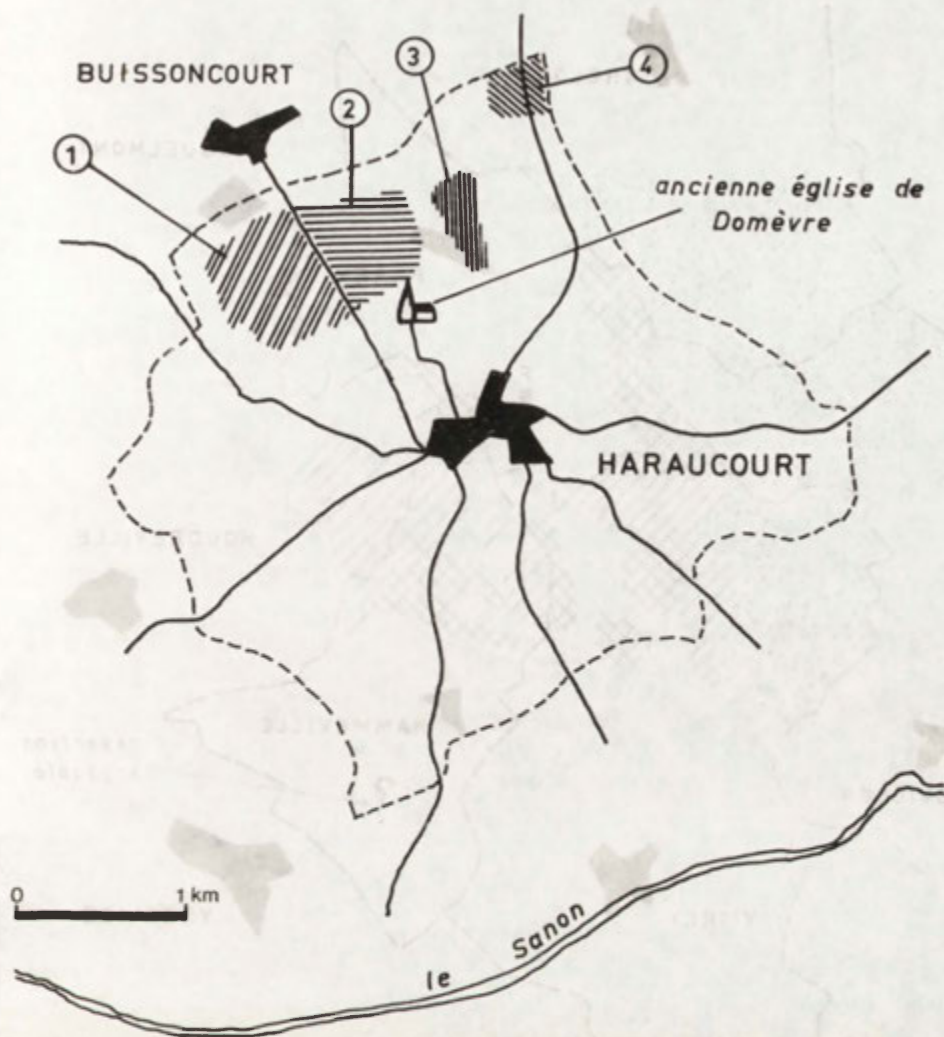


Fig. 4. L'impact des communaux de Haraucourt rassemblés sur un ancien finage de village déserté

En hachures — anciens "communaux" de Haraucourt, aujourd'hui partagés; 1 — ensemble de 43 ha, section cadastrale dite "de Domèvre", 2 — ensemble de 34 ha, section de "La Haute Chassée", 3 — ensemble de 20 ha, même section, 4 — ensemble de 10 ha

Au contraire, les observations de H. Grees et A. Humm se vérifient assez couramment pour les abandons antérieurs. Haraucourt par exemple (Meurthe et Moselle — canton de St-Nicolas) enferme dans ses limites actuelles l'ancien finage de Domèvre (Fig. 4) dont l'emplacement est aisément repérable grâce à la tour de l'église de l'ancien village, probablement disparu au bas Moyen-Age. C'est là que se trouvaient regroupés plus de 100 hectares de terres arables communes, soit un total assez rarement atteint.

A partir de cet exemple et d'autres semblables, peut-on établir une relation nécessaire entre les concentrations géographiques de biens communaux de

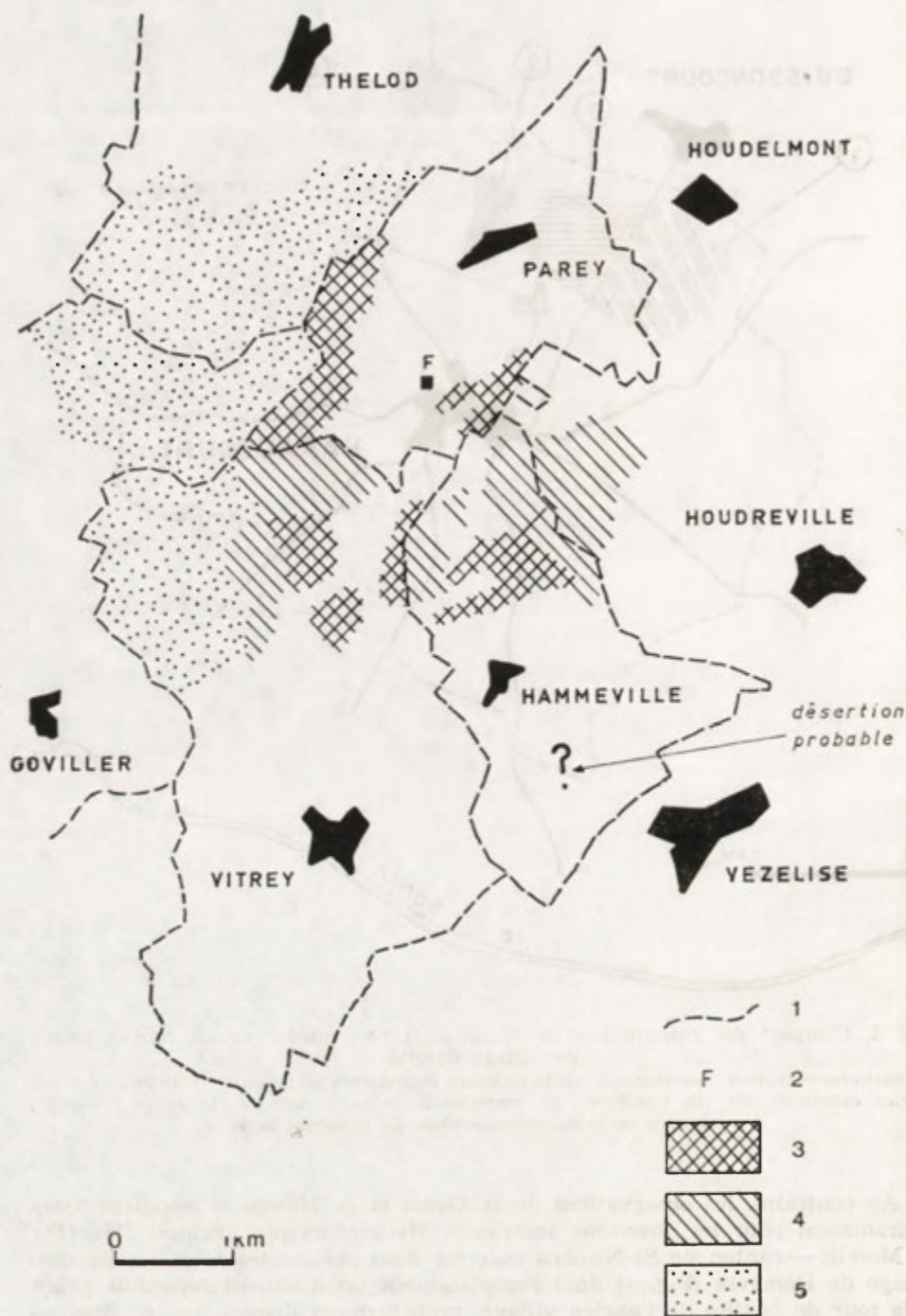


Fig. 5. Groupement des biens communaux dans plusieurs finages contigus (Meurthe et Moselle)

1 — limite communale, 2 — ferme de la Hutterie, 3 — communaux, 4 — forêt communale, 5 — forêt domaniale



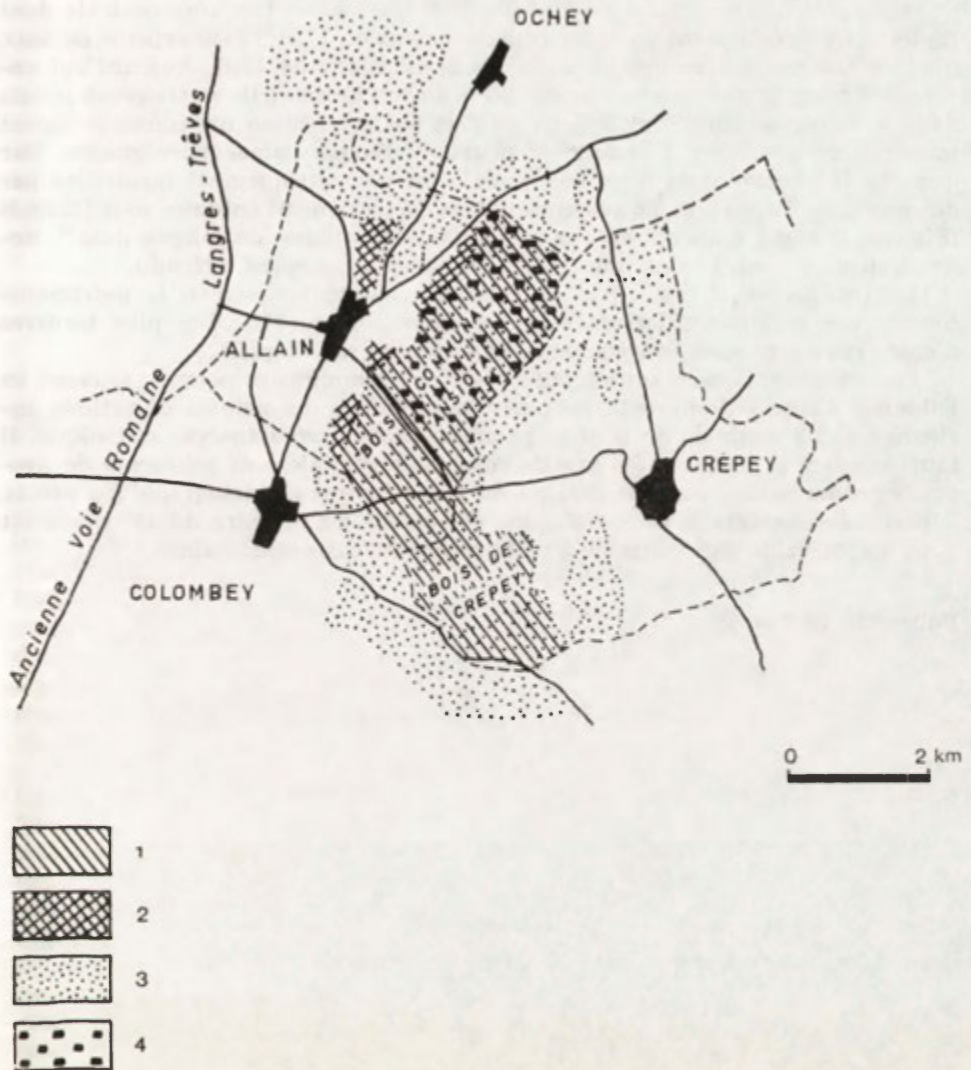


Fig. 6. Exemple d'un territoire très anciennement cultivé et déserté, devenu propriété communale (Meurthe et Moselle)

1 — bois communaux, 2 — "communaux" (terres-friches), 3 — forêt et bois non communaux, 4 — indices d'une ancienne mise en culture

quelque importance et des désertions lointaines dont la plupart n'auraient laissé aucun souvenir?

De telles concentrations existent en grand nombre, souvent indépendantes des limites communales actuelles. La Fig. 5 en donne un échantillon, en Lorraine centrale (Meurthe et Moselle, canton de Vézelize) associant biens domaniaux et biens communaux. Dans l'état actuel des recherches, rien ne permet ici d'invoquer une éventuelle désertion ancienne pour expliquer le regroupement des propriétés collectives. C'est néanmoins une hypothèse de travail plausible que l'exemple ci-dessous contribue à justifier.

Allain est une commune de quelque 1600 ha sise en Lorraine centrale dont les habitants déclaraient posséder collectivement en 1700<sup>20</sup> 2640 arpents de bois, plus de 520 ha, chiffre inégalé dans les déclarations de 1700. Aujourd'hui encore, les biens communaux occupent 55% du territoire et ils se trouvent réunis dans le même secteur S. et S.E. de celui-ci où la tradition n'a conservé aucun souvenir de désertion. Il en existe pourtant d'indiscutables témoignages. Sur quelque 400 hectares, la forêt communale est géométriquement quadrillée par des murettes d'épierrement aux trois quarts ou totalement enfouies sous l'humus (Fig. 6). Il s'agit d'un ancien finage cultivé, abandonné de longue date<sup>21</sup>, devenu ensuite propriété commune et à ce titre jalousement défendu.

En conclusion, il n'y a pas de relation systématique entre le patrimoine foncier des communes lorraines et les désertions rurales. Les plus tardives d'entre elles sont sans conséquences importantes sur ce plan.

En revanche, l'étude approfondie des biens communaux permet, souvent en l'absence d'autres documents, de poser le problème de maintes désertions anciennes. Cette méthode ne peut se résumer à une simple analyse statistique. Il faut recenser et localiser les grands ensembles spatialement cohérents de propriétés communales, les plus chargés de sens. Un travail cartographique précis, à partir des terriers d'Ancien Régime et surtout du cadastre du 19<sup>e</sup> siècle est donc un préalable indispensable à toute recherche dans ce domaine.

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<sup>20</sup> *Déclarations de Communautés de 1700*, Archives départementales de Meurthe et Moselle, B. 11 716, n° 20.

<sup>21</sup> J. Peltre, *Recherches métrologiques sur les finages lorrains*, 1975, Libraire H. Champion, Paris, p. 390.

## LE PAYSAGE RURAL GALLO-ROMAIN: ÉTAT DES CONNAISSANCES ET PERSPECTIVES DE RECHERCHES

XAVIER DE PLANHOL

### LES ANTÉCÉDENTS: LES PAYSAGE RURAL DE LA GAULE INDÉPENDANTE

Nous sommes très éloignés de pouvoir reconstruire de façon précise le paysage rural de la Gaule indépendante, avant la conquête romaine. Les données les plus explicites, celles qu'on peut tirer du texte de César, nous indiquent cependant avec certitude que *l'habitat rural* y était complexe et associait des formes de concentration et de dispersion. Aux *oppida* (villes-refuges) s'ajoutaient en grand nombre les *vici* (bourgs ou villages) et les *aedificia*<sup>1</sup>, ce dernier terme désignant sans doute en fait un hameau correspondant au moins à la résidence d'une famille élargie. Les *aedificia* peuvent paraître avoir été la forme prédominante, comme l'affirme sans ambages un texte trop peu utilisé de César décrivant ces habitations isolées, dans des clairières de dimensions modestes, à proximité des cours d'eau (*aedificio circumdato silva ut sunt fere domicilia Gallorum, qui plerumque silvarum ac fluminum petunt propinquitates*, B.G., VI, xxx), tandis que les plateaux restaient relativement peu occupés, dans la tradition de l'habitat néolithique<sup>2</sup>. Cependant cette impression doit être nuancée. On peut considérer qu'existait un certain équilibre entre population groupée et population dispersée. Les Helvètes, qui étaient 263 000<sup>3</sup>, comptaient 12 *oppida*, 400 *vici* et *reliqua privata aedificia*<sup>4</sup>. Sans pouvoir en tirer de conclusions fermes faute de connaître la population moyenne des *vici*, il n'est cependant pas téméraire de déduire que leur population globale devait sans doute au moins équilibrer celle des *aedificia*. Par ailleurs si le petit nombre des exemples interdit de tenter un véritable raisonnement statistique, on doit néanmoins constater que les termes de *vici* et *aedificia* apparaissent, dans le récit de César, liés de façon indissoluble. Ils apparaissent conjointement 8 fois, contre 5 fois pour les *vici* seuls et 3 fois pour les seuls *aedificia*. Encore un de ces derniers passages se rapporte-t-il aux Ménapes (IV, xxxviii) pour lesquels César signale ailleurs (VI, vi) *aedificia vicosque*. Ce relevé numérique, pour insuffisant qu'il soit, permet néanmoins de conclure à la prédominance probable d'un habitat mixte, à agglomérations et dispersion intercalaire.

<sup>1</sup> L'ensemble des textes de César sur l'habitat a été réuni et commenté par H. d'Arbois de Jubainville, *Recherches sur l'origine de la propriété foncière et des noms de lieux habités en France*, Paris 1890, p. 77-98.

<sup>2</sup> Pour la filiation entre l'habitat préhistorique et celui de la période gauloise voir R. Fossier, *La terre et les hommes en Picardie jusqu'à la fin du XIII<sup>e</sup> siècle*, 2 vols., Paris-Louvain 1968, cf. I, p. 112-116 et 119-120.

<sup>3</sup> B.G., I, xxix.

<sup>4</sup> *Ibid.*, I, v.



La structure sociale et le régime foncier peuvent s'analyser clairement en fonction de cet habitat<sup>5</sup>. On sait que la grande propriété, expression foncière d'une aristocratie gauloise dont on connaît le rôle social prédominant, devait être largement répandue<sup>6</sup>. Elle possédait déjà des techniques remarquablement perfectionnées, telle la moissonneuse attelée qui faisait l'admiration des agronomes romains<sup>7</sup>. En revanche la main d'oeuvre servile était peu nombreuse en Gaule<sup>8</sup>, et les analyses récentes ont ainsi développé l'idée que le travail sur les terres des grands domaines devait être largement assuré par la population des *vici* voisins, une part étant vraisemblablement exploitée directement par le propriétaire lui-même et le reste morcelé en petits lots attribués à des "colons"<sup>9</sup>, en un système préfigurant celui du colonat du Bas Empire ou de la réserve et des manses de l'époque carolingienne<sup>10</sup>. Aux *aedificia*, manoirs des riches propriétaires, les *vici*, bourgs ruraux, "s'associaient... en un tout inséparable"<sup>11</sup>. Cette construction, assez théorique, est certes plausible. Mais on sait que la stratification sociale gauloise était très complexe et il est difficile d'admettre que tous les *aedificia*, si nombreux, aient correspondu à de grandes propriétés recourant à une main d'oeuvre extérieure. On peut penser que dans le cas des propriétés moyennes ou modestes la mise en valeur des terres groupées autour des *aedificia* pouvait être assurée par la grande famille étendue du propriétaire, assistée peut-être de quelques esclaves. En tout cas il est tentant de faire un rapprochement avec les faits irlandais, où le contraste *baile-rath*, qui n'est pas sans rappeler celui des *vici* et des *aedificia*, est généralement rapporté aujourd'hui à l'opposition de la population servile pré-celtique et des envahisseurs celtes<sup>12</sup>. Les *aedificia* exprimeraient la structure familiale et sociale de l'aristocratie des envahisseurs celtes, se traduisant par les grandes exploitations isolées insérées dans la trame de villages groupés plus anciens, de tradition du Néolithique ou du Bronze, à population progressivement celtisée.

Quelle était la traduction de ces structures foncières et sociales dans le parcellaire et le paysage? Les progrès récents de la détection photographique aérienne ont apporté quelques éléments de réponse, encore trop localisés. C'est ainsi qu'en Picardie on a pu repérer quelques parcellaires irréguliers enclos du type des *celtic fields*<sup>13</sup>. Par ailleurs le paysage rural qui accompagnait les *aedificia* comportait de nombreux enclos, dont beaucoup sont observables sur

<sup>5</sup> Synthèse la plus récente dans R. Martin, *Recherches sur les agronomes latins et leurs conceptions économiques et sociales*, Paris 1971, cf. chap. III, p. 73-80, "Économie rurale et technique agricole en Gaule. Tentative de mise au point".

<sup>6</sup> C. Jullian, *Histoire de la Gaule, II. La Gaule indépendante*, Paris 1908 (réimpr. phot. de la 4e édit., Bruxelles 1964), p. 71-74, 277; E. Thévenot, *Histoire des Gaulois*, Paris 1949, p. 64 sq.

<sup>7</sup> Plin., N. H. XVIII, 296; Palladius, VII, 2; cf. P. Lebel, La moissonneuse gallo-romaine, *Rev. Archéol. Est*, 1959, p. 70-74; J. Kolendo, La moissonneuse antique en Gaule Romaine, *Annales. Econ., Soc., Civilis.*, 1960, p. 1099-1114.

<sup>8</sup> C. Jullian, *op. cit.*, p. 64-66.

<sup>9</sup> F. Lot, *La France des origines à la guerre de cent ans*, Paris 1948, p. 22-23; L. Harmand, *L'Occident romain*, Paris, 1960, p. 360.

<sup>10</sup> R. Martin, *op. cit.*, p. 79.

<sup>11</sup> L. Harmand, *op. cit.*, loc. cit.

<sup>12</sup> Cf. J. H. Johnson, The development of the rural settlement pattern of Ireland, *Geograf. Annaler*, 1961, p. 165-173 (voir p. 168); R. A. Butlin, Irish agrarian history: inventory and prospect, dans F. Dussart, édit., *L'habitat et les paysages ruraux d'Europe*, Liège 1971 (Les Congrès et Colloques de l'Université de Liège, 58), p. 59-68 (voir p. 60-61).

<sup>13</sup> R. Agache, *Détection aérienne de vestiges protohistoriques, gallo-romains et médiévaux dans le bassin de la Somme et ses abords*, Amiens 1970 (2e édit. augmentée, 1971), 230 p. (*Bull. Soc. Préhist. Nord*, N° 7), cf. p. 33 et fig. 362 à 365.

photos aériennes et ont fourni à la fouille des vestiges de l'Age du Fer<sup>14</sup>. Mais ces enclos, de dimensions assez vastes, semblent le plus souvent isolés, et ne forment qu'exceptionnellement des réseaux. Il devait y avoir surtout des enclos autour des fermes elles-mêmes, ainsi que des parcs à bétail indépendants, où l'on repère parfois un entonnoir pour l'entrée du bétail<sup>15</sup>. Il est vrai que la photographie aérienne ne permet de repérer que des délimitations stables et enracinées, surtout des fossés ou talus, et que de simples clôtures légères environnant des champs cultivés mobiles n'auraient guère pu laisser de traces. De toute façon les pièces de terre des grandes exploitations, où évoluaient les moissonneuses attelées, devaient être de vastes dimensions, et la densité des clôtures devait y être faible. D'autre part il est permis de penser qu'un paysage de champs ouverts à culture continue, celui des structures d'*esch* ou d'*infield* où il faut sans doute voir la couche la plus ancienne de nos structures agraires permanentes, était assez largement répandu, entre les champs temporaires sans doute enclos découpés dans la végétation périphérique, en association avec les *vici*. On a pu montrer que ces terroirs elliptiques ou circulaires<sup>16</sup>, résultat de campagnes de défrichement successives s'étendant progressivement, constituaient un domaine géographique cohérent correspondant à une phase située historiquement entre le Néolithique Campignien et les premiers Celtes des Champs d'Urnes, à savoir celle des Pasteurs des Plateaux et des Chasséens édificateurs des mégalithes, approximativement entre -3500 et -1500. Dégradés (semi-circulaires) et sans habitat dans une frange de destruction orientale correspondant à l'affrontement avec les peuples des Champs d'Urnes, ces terroirs se sont conservés dans les secteurs plus occidentaux où la continuité de l'occupation du sol a dû être assurée<sup>17</sup>. Ils faisaient partie intégrante du paysage de la Gaule celtique, et devaient y introduire, autour des hameaux (*vici?*), d'assez notables taches de champs ouverts, sans doute entourées de clôtures périphériques.

De cette importante extension des champs ouverts, ou du moins de la médiocrité et de la faible densité générale des clôtures, une lecture attentive du texte de César peut nous apporter une confirmation. Il est significatif que le conquérant romain, dans ses soigneuses descriptions des opérations militaires, n'y fasse pratiquement jamais allusion à des clôtures ou à des haies qui auraient gêné les évolutions de ses soldats, et particulièrement de la cavalerie. Et c'est comme une exception qu'il décrit les procédés employés par les Nerviens pour arrêter les cavaliers ennemis: *Nervii antiquitus, quum equitatu nihil possent... quo facilius finitimorum equitatum... impedirent, teneris arboribus incesis atque inflexis, crebis in latitudinem ramis et rubis sentibusque interjectis effecerant, ut instar muri hae saepes munimenta praeberent: quo non modo intrari, sed ne prospici quidem posset. His rebus quum iter agminis nostri impediretur...* (B.G., II, xvii). En fait il faut certainement exclure l'idée d'une vocation exclusivement militaire de ces palissades, idée venue spontanément à l'homme de guerre, mais que dément un peu plus loin son propre texte, lorsque, racontant la bataille contre les Nerviens, il nous dépeint, non

<sup>14</sup> *Ibid.*, p. 33-35.

<sup>15</sup> *Ibid.*, fig. 342.

<sup>16</sup> Il faut en effet les rapprocher. Voir A. Meynier, *Parcelles circulaires et elliptiques, Norois*, 1972, p. 117-119 (compte-rendu du livre de J. Soyer cité plus loin). Sur les parcelles elliptiques, A. Meynier, *Les ensembles cadastraux circulaires en Bretagne, Chronique géographique des pays celtes*, dans *Ann. Bretagne*, 1945, p. 14-25, et en dernier lieu, du même, *La genèse du parcellaire breton, Norois*, 1966, p. 595-610.

<sup>17</sup> J. Soyer, *La conservation de la forme circulaire dans le parcellaire français*, Paris 1970, cf. particulièrement p. 89-96.



des fortifications, mais un réseau de haies épaisses, évoquant irrésistiblement un bocage de haies vives, qui couvrait l'emplacement du combat: *Quum, diversis legionibus, aliae alia in parte ... sepibusque densissimis...interjectis, prospectus impediretur* (Ibid., II, xxii). En tout cas ce paysage n'a pas d'homologue dans tout le reste de l'oeuvre de César, et il faut sans doute admettre l'idée suivant laquelle c'est sur ce modèle qu'il fit construire, dans ses défenses autour d'Alésia, des fouillis de troncs et branches enchevêtrées qui y paraissaient comme une nouveauté dans la fortification<sup>18</sup>. Le caractère exceptionnel de ce bocage des Nerviens conduit à penser que les champs ouverts tenaient déjà une large place dans le paysage rural de la Gaule pré-romaine.

## LE PAYSAGE GALLO-ROMAIN: LES CENTURIATIONS

L'occupation romaine de la Gaule s'est traduite, sur le plan du parcellaire et de l'habitat, par deux faits majeurs: l'extension des centuriations d'une part; la multiplication des grandes propriétés-exploitations, les *villae*, d'autre part.

Le paysage des centuriations, expression de la réorganisation volontaire du territoire en fonction d'un plan général de colonisation, est la manifestation la plus spécifique de l'implantation romaine. Son extension en Gaule est sans doute encore très imparfaitement connue. Cependant les découvertes et observations qui se sont multipliées au cours des dernières décennies et les analyses systématiques entreprises ces dernières années permettent de dégager un certain nombre de faits essentiels. Les centuriations semblent avoir recouvert la quasi-totalité des plaines de la région méditerranéenne, dans l'ancienne province romaine<sup>19</sup>. Il s'agissait là réellement d'une main-mise systématique et d'un type régional. Dans le reste de la Gaule les trouvailles ont été nombreuses et dispersées, de l'Armorique et de la Normandie à l'Alsace et à la Belgique, en passant par la Bourgogne, la Picardie et la région messine<sup>20</sup>. Mais il ne s'agit guère que de taches isolées, circonscrites au voisinage des centres urbains ou le long de routes importantes. Le problème qui reste posé est celui de savoir si cette rareté relative est originelle, ou si elle n'est qu'apparente et due à la disparition de leurs traces lors de mutations du parcellaire à l'époque des invasions germaniques ou au Moyen-Age? Les deux réponses contiennent probablement l'une et l'autre une part de vérité. L'importance des vestiges de métrique romaine le long des routes, et leur persistance dans les limites communales, sur lesquelles on a attiré l'attention<sup>21</sup>, plaident plutôt en faveur de la seconde

<sup>18</sup> C. Jullian, *Vercingétorix*, Nelle Edit., Paris 1963, p. 248.

<sup>19</sup> D'après les travaux de J. Soyer, Les centuriations de Provence, *Rev. Archéol. Narbonn.*, VI, 1973, p. 197-232. La monographie la plus approfondie pour le territoire français est celle de A. Piganiol, *Les documents cadastraux de la colonie romaine d'Orange*, Paris 1962 (XVIIe suppl. à *Gallia*), avec bibliographie générale sur le sujet.

<sup>20</sup> On trouvera une bibliographie détaillée des trouvailles de centuriation sur le territoire français dans l'article précité de J. Soyer, note 1, p. 197. On y ajoutera pour l'Alsace: J. J. Hatt, E. Juillard, G. Levy-Mertz, Traces de centuriation romaine en Alsace, *Rev. Archéol. Centre Est*, 1959, p. 298-308; pour la Picardie: R. Fossier, *op. cit.*, p. 138-139; pour la Lorraine: J. Peltre, Les faits d'orientation dans la structure agraire en Lorraine, p. 333-340 dans F. Dussart, *édit., op. cit.*, texte repris et élargi dans son ouvrage *Recherches métrologiques sur les finages lorrains*, Thèse Paris 1974 (sous presse); pour la Belgique: Th. Brulard, La vallée de la Nethen, étude de géographie rurale, p. 391-425 dans *Volume jubilaire M. A. Lefèvre*, Louvain 1964, cf. p. 397-398. On est aujourd'hui bien loin, on le voit, de M. Bloch écrivant en 1931 (*Les caractères originaux de l'histoire rurale française*, Oslo, cf. 2e édit., Paris 1952, p. 65): "N'y a-t-il pas, dans notre pays, des traces de centuriatio romaine?... La question a été posée... Elle attend encore sa solution".

<sup>21</sup> J. Peltre, *Recherches...*, p. 340 sq.



solution<sup>22</sup>. Il est cependant certain qu'il n'y a pas eu de réseau quasi-continu comparable à celui de la *province*. Déterminer la part exacte tenue par les centuriations dans le paysage des Trois Gaules est une des tâches majeures qui subsistent.

Quant à la nature du paysage créé par les centuriations, bien des énigmes subsistent également. Certes la tracé des limites de centurries, avec ses chemins de largeur déterminée (en principe 8 pieds = 2,37 m, et 12 pieds = 3,55 m pour les *quintarii*) a dû être fréquemment souligné par des clôtures, et c'est de toute façon ce dessin qui, pour l'essentiel, s'est transmis jusqu'à nous. Mais qu'en était-il à l'intérieur des centurries? Le parcellaire pouvait y être très morcelé. Les lots individuels et leur disposition y ont été, on le sait, extrêmement variables, de 2 à 66<sup>2</sup>/<sub>3</sub>, *jugeres*<sup>23</sup>, et la division d'une centurie en dix rectangles allongés de 20 *jugeres* (20 x 2 *actus*) a pu être assez fréquente. A Orange les lots semblent avoir été le plus souvent de 33<sup>1</sup>/<sub>3</sub>, ou 66<sup>2</sup>/<sub>3</sub>, *jugeres*<sup>24</sup>, mais il s'agit d'une réorganisation relativement tardive. De toute façon existaient à l'intérieur des centurries, à côté des lots individuels, de nombreux petits fragments non assignés, résidus de découpage imposés le plus souvent par le milieu naturel, restés terres communes de la colonie, qui les louait<sup>25</sup>. Quant aux limites des parcelles, il est très probable qu'elles étaient le plus souvent peu apparentes, et réduites à une ligne théorique, droite ou d'équerre, non jalonnée: *an normales, quod saepe in agris adsignatis invenitur*<sup>26</sup>.

#### LE PAYSAGE GALLO-ROMAIN. LES GRANDS DOMAINES

Si les réorganisations du parcellaire par les centuriations ne semblent pas avoir recouvert l'ensemble des Gaules, la période romaine se traduit en revanche par l'extension généralisée de la grande propriété. A partir des tendances déjà existantes à l'époque de la Gaule indépendante, le grand domaine, la *villa*, va devenir la forme normale, certainement la plus répandue, de l'utilisation du sol.

De cette généralisation, des preuves ont été depuis longtemps apportées par les textes et par l'exploration archéologique au sol<sup>27</sup>. L'impression qu'on en retire est concordante. Les mentions de *villae* sont innombrables dans les sources littéraires ou épigraphiques, celles de *vici* beaucoup plus rares. "Nous connaissons par leur nom des milliers de domaines; nous ne connaissons qu'une

<sup>22</sup> C'est l'avis de R. Fossier, *op. cit.*, *loc. cit.*

<sup>23</sup> R. Chevalier, La centuriation et les problèmes de la colonisation romaine, *Etud. Rur.*, 3, 1961, p. 54-79, cf. p. 70-71; H. J. Nitz, Zur Entstehung und Ausbreitung schahbrettartiger Grundrissformen ländlicher Siedlungen und Fluren, *Hans Poser Festschrift (Göttinger Geogr. Abhandl., 60)*, Göttingen 1972, p. 375-400, cf. p. 379.

<sup>24</sup> A. Piganiol, *op. cit.*, p. 56.

<sup>25</sup> A. Piganiol, *op. cit.*, *passim*; voir les reconstitutions détaillées de centurries individuelles, dont le dépouillement est un des apports essentiels du volume.

<sup>26</sup> Hygin, p. 129, édit. K. Lachmann (Tome I de F. Blume, K. Lachmann, T. Mommsen, A. Rudorff, hrsgb., *Die Schriften der römischen Feldmesser*, 2 vols., Berlin 1848-1852. Toutes nos citations ultérieures des *gromatici* sont faites d'après cette édition).

<sup>27</sup> La synthèse fondamentale sur la *villa* gallo-romaine reste Fustel de Coulanges, *Histoire des Institutions Politiques de l'Ancienne France*, T. IV. *L'alleu et le Domaine Rural pendant l'Époque Mérovingienne*, 2e édit., Paris 1914 (p. 1-96, et pour la période mérovingienne p. 198-238, 438-461). Voir également C. Jullian, *op. cit.*, IV. *Le gouvernement de Rome*, p. 373-378; VIII. *Les empereurs de Trèves. II. La terre et les hommes*, p. 130-149; A. Grenier, *Manuel d'Archéologie Gallo-Romaine*, T. VI, Paris 1934; dans J. Déchelette, *Manuel d'Archéologie Préhistorique, Celtique et Gallo-Romaine*, voir p. 727-735, "Agglomération et dispersion", et sq.

soixantaine de villages", écrivait déjà Fustel de Coulanges<sup>28</sup>. Cette *villa* gallo-romaine, qui se situe fréquemment dans la filiation topographique directe d'un *aedificium* de l'époque précédente<sup>29</sup>, présente cependant par rapport à lui une différence majeure d'ordre social, due à la généralisation de l'esclavage et de l'exploitation directe. D'autre part il est extrêmement probable qu'un grand nombre de ces *villae* correspondent à une phase nouvelle de colonisation du sol, lors du Haut Empire, se traduisant par l'extension de grands domaines céréaliers sur les plaines où pouvait s'implanter une puissante économie commercialisée. Les données de la toponymie, la répartition systématique de certains de ces domaines le long de voies romaines, concordent à suggérer un puissant mouvement de mise en valeur<sup>30</sup> dans le cadre de ce régime de grandes propriétés.

En face de ces grands domaines, la part réservée aux *vici* reste difficile à apprécier. Leur nature exacte elle-même ne peut souvent être saisie: villages agricoles, ou bourgs surtout artisanaux et commerçants aux carrefours de routes? Le problème, qui a fait l'objet de nombreuses discussions de caractère assez théorique, n'est pas simplifié par le fait que les termes de *villa* et de *vicus* semblent bien avoir été assez fréquemment employés l'un pour l'autre. L'auteur de la dernière mise au point générale concluait que le problème est à reprendre dans l'ensemble<sup>31</sup>. En tout cas, quel qu'aît été le mécanisme de l'extension de la *villa* sur les plateaux céréaliers, défrichements nouveaux ou regroupements et usurpations de terres déjà plus ou moins exploitées par des individus isolés, il est certain que la part relative des *vici*, face aux *villae*, dans le paysage du Haut Empire, avait considérablement diminué.

Mais de toute façon la discussion ainsi amorcée par les méthodes traditionnelles ne pouvait permettre de déterminer dans le détail, de façon approfondie, la répartition des deux formes. Les recensements et répertoires archéologiques régionaux, pour exhaustifs qu'ils fussent, ne pouvaient apporter aucune information sérieuse sur ce point. Permettant souvent de préciser la densité de l'occupation du sol, ou du moins ses contrastes régionaux, ils restaient muets sur la nature exacte de ce peuplement<sup>32</sup>.

Ce sont les progrès récents de la détection photographique aérienne qui ont apporté, aux vues, jugées parfois périmées ou vieilles, de Fustel de Coulanges, une confirmation éclatante. C'est ainsi que dans une région jugée naguère comme pauvre en *villae*<sup>33</sup>, les remarquables prospections de R. Agache<sup>34</sup> ont révélé leur très grande densité et leur écrasante prédominance spatiale, face à la faible importance des agglomérations urbaines ou des *vici*. Certes le petit nombre apparent de ceux-ci est sans doute dû partiellement au fait que les constructions très légères, de bois ou de pisé, des hameaux indigènes, ont pu

<sup>28</sup> *Op. cit.*, p. 41.

<sup>29</sup> A. Grenier, *op. cit.*, p. 782-796.

<sup>30</sup> R. Fossier, *op. cit.*, p. 134-138.

<sup>31</sup> G. Fournier, *Le peuplement rural en Basse Auvergne durant le Haut Moyen-Age*, Paris 1962, p. 127-129. L'importance des *vici* avait été minimisée par Fustel de Coulanges, *op. cit.*, p. 40-42, 198-220. *Contra*, J. Flach, *Les origines de l'ancienne France aux Xe et XIe siècles*, Paris, 3 vols., 1886-1904, cf. t. 2, p. 47-54. Sur la nature des *vici* de la Gaule indépendante, C. Jullian, *op. cit.*, II. *La Gaule indépendante*, p. 242-243.

<sup>32</sup> Voir par exemple la carte donnée par G. Fournier, *op. cit.*, p. 86 (et p. 85-100 en général pour le peuplement gallo-romain); ou encore X. de Planhol et A. Pérardel, *La répartition géographique des vestiges archéologiques gallo-romains en Lorraine*, *Rev. Géogr. Est*, 1969, p. 177-180.

<sup>33</sup> A. Grenier, *op. cit.*, p. 869.

<sup>34</sup> *Op. cit.*



échapper à l'observation aérienne. D'autres *vici* doivent être dissimulés sous les villages actuels qui leur ont succédé et qui les masquent<sup>35</sup>. Même s'il faut atténuer la première impression, il n'en reste pas moins que ces *vici* "semblent rares, misérables et fort peu importants, somme toute, par rapport à l'extrême abondance des grandes villas isolées dans la campagne qui sont vraiment le trait dominant de l'habitat antique"<sup>36</sup>. L'implantation, si dense, des *villae*, était certainement à peu près exclusive<sup>37</sup>. Ces découvertes imposent de reconsidérer totalement les conclusions qu'on pouvait tirer jusqu'ici de l'exploration archéologique au sol<sup>38</sup>.

Le problème qui reste posé est de savoir si ces constatations encore fragmentaires peuvent être généralisées, dans l'espace et dans le temps? La multiplication des *villae*, au Haut Empire, dans les fertiles terres à blé, en particulier en Picardie sur les plateaux limoneux du Santerre, y exprimait, on l'a vu, une grande production céréalière commercialisée. Il est probable que leur nombre, absolu et relatif, devait être nettement plus faible dans des régions moins favorisées, comme c'est d'ailleurs le cas en Picardie près du littoral, moins limoneux<sup>39</sup>. On est prêt à admettre, au moins comme hypothèse de travail, la prédominance des *villae* dans les grandes plaines limoneuses ou calcaires, une plus forte proportion de *vici* dans des régions pauvres, montagneuses, encore largement boisées. Le domaine géographique des *villae*, ce devait bien être essentiellement cette *pars Galliarum planior*<sup>40</sup> où les agronomes admiraient les moissonneuses attelées des *latifundia*. Seule la multiplication des recherches aériennes systématiques pourra nous apporter des certitudes sur ce point capital. Cependant il n'est pas exclu que d'autres structures économiques aient accompagné la *villa* en dehors des grandes plaines céréalières. Dans le Languedoc, où elles se sont multipliées, sur le territoire de Béziers, aux dépens d'une centuriation précoce, elles ont été très répandues dans les régions de collines, avec pour base une polyculture méditerranéenne sans doute plus arbustive que céréalière, bien qu'elles y aient été au total moins denses que dans la plaine<sup>41</sup>.

#### LE PAYSAGE GALLO-ROMAIN. LA PRÉDOMINANCE DES CHAMPS OUVERTS

Le paysage rural de la villa était certainement caractérisé par la prépondérance des champs ouverts. Il devait s'agir essentiellement de grandes pièces de terre de formes quadrilatérales ou polygonales variées, cultivées en céréales ou laissées au pacage des troupeaux pendant la période de jachère, que rien ne venait séparer à l'intérieur des limites d'un même domaine. Les bergers et bouviers (*pastores, bubulci*<sup>42</sup>), toujours nombreux dans le personnel, les gardes champêtres (*saltuarii*), veillaient à ce que les troupeaux ne s'écartent pas de leurs parcours. On pourrait comparer ce paysage à celui qui a été défini dans le centre du Bassin de Paris comme l'openfield-mosaïque<sup>43</sup>, en liaison avec le

<sup>35</sup> *Ibid.*, p. 186.

<sup>36</sup> *Ibid.*, loc. cit.

<sup>37</sup> *Ibid.*, p. 203.

<sup>38</sup> Le chapitre sur la répartition des *villae* donné il y a 40 ans par A. Grenier (*op. cit.*, p. 858-875) est ainsi complètement à revoir.

<sup>39</sup> R. Agache, *op. cit.*, p. 200.

<sup>40</sup> Palladius, VII, 2.

<sup>41</sup> M. Clavel, *Béziers et son territoire dans l'antiquité*, Paris 1970, p. 296-324, et carte p. 301.

<sup>42</sup> Cf. Digeste, XXXIII, 7, 18.

<sup>43</sup> P. Brunet, *Structure agraire et économie rurale des plateaux tertiaires entre la Seine et l'Oise*, Caen 1960, p. 56-58.



remembrement réalisé à l'époque moderne et contemporaine par les grandes exploitations industrialisées.

Entre domaines différents, les limites ne devaient être guère plus apparentes. Toute la tradition juridique romaine, telle qu'elle s'exprime en particulier dans l'oeuvre des *gromatici*, réalisée et codifiée essentiellement pendant le Haut Empire, à l'époque du triomphe de la *villa*, indique un paysage où l'enclos tient peu de place. Dans les traités des limites (*de terminibus*) et des controverses qui peuvent surgir à leur sujet<sup>44</sup>, les haies et palissades sont certes présentes et on précise même parfois qu'il s'agit d'une forme usuelle (*ut solet, vepribus*<sup>45</sup>), mais au total leur part relative apparaît minime par comparaison avec l'extraordinaire variété des repères et limites de toutes sortes: *Finis enim multis documentis servabitur*<sup>46</sup>. Parmi ceux-ci, certains suggèrent encore l'idée de délimitations continues et visibles, telles que ces bourrelets ou levées de terre (*marginibus quibusdam tanquam pulvini*), ou ces limites qui pouvaient être des enceintes (murettes?) ou des sentiers, et les fossés et routes (*fossis, aut viis*). Mais d'autres sont de simples accidents naturels: rivières, sommets de collines, lignes de partage des eaux (*aut rivis, aut jugis montium, aut devergiis aquarum*) ou escarpements (*superciliis*). Et ailleurs il ne s'agit que d'arbres isolés (*arboribus*), ou de lignes idéales non concrétisées sur le sol (*rigoribus et saepe normalibus*). Surtout, ce sont des bornes, qui sont parfois faites de bois (*aut robureos aut excerta materia ligneos*) mais qui sont le plus souvent des pierres taillées (*termini... solent plerique lapidei esse*)<sup>47</sup>. Leur gamme était d'une déconcertante richesse. Un vocabulaire d'une infinie précision les distinguait par leur forme, leurs dimensions, leur matière, les signes qu'elles portaient. Le répertoire de Balbus *nomina lapidum finalium* nous en révèle 44 noms différents<sup>48</sup>. Un autre, les *Terminorum diagrammata*, abondamment illustré, en énumère 46 catégories<sup>49</sup>. Le plus souvent c'était bien le Dieu Terme, par sa seule présence, qui suffisait à délimiter les propriétés.

Il est certain que cette conception du paysage s'est manifestée en Gaule comme ailleurs. Et c'est bien à l'idée d'une prépondérance des champs ouverts que sont parvenus récemment plusieurs chercheurs travaillant indépendamment en diverses régions: en Picardie<sup>50</sup>; en Bretagne où il faut renoncer à l'idée qui faisait remonter le réseau du bocage à des alignements préhistoriques qui ont pu tout au plus lui fournir des points d'appui ultérieurs, et où quelques observations de haies ou levées probablement antiques ne contredisent pas l'impression d'une prédominance de l'openfield jusqu'au Haut Moyen-Age inclus<sup>51</sup>; en Auvergne où, à l'époque mérovingienne encore "Quelques haies sont signalées... pour clore des parcelles défrichées par des ermites au milieu des forêts qui couvraient

<sup>44</sup> Voir par exemple Hygin, édit. Lachmann, p. 126-129, ou le *De controversis agrorum* de Frontin, *ibid.*, p. 34-59.

<sup>45</sup> Hygin, *ibid.*, p. 126.

<sup>46</sup> Hygin, *ibid.*

<sup>47</sup> Hygin, p. 126-129, pour toute cette énumération.

<sup>48</sup> Edit. Lachmann, p. 249-250 et fig. planche 26.

<sup>49</sup> *Ibid.*, p. 340-342, et figures 270-315.

<sup>50</sup> R. Agache, *op. cit.*, p. 203, qui en tire cependant des conclusions hâtives lorsque, discutant l'idée qui fait attribuer l'extension de l'openfield au Moyen-Age, il écrit que: "le régime antique de la grande propriété terrienne, bien attesté par la photographie aérienne, suggère que l'openfield remonte à l'époque romaine" (l'italique est de nous). Il n'y a en réalité ni continuité, ni identité de structure parcellaire, entre cet openfield-mosaïque gallo-romain et les champs ouverts lanières du Bas Moyen-Age et de l'époque moderne.

<sup>51</sup> J. Meyer, L'évolution des idées sur le bocage en Bretagne, p. 453-467 de *La pensée géographique française contemporaine. Mélanges offerts au professeur A. Meynier*, Saint-Brieuc 1972 (cf. p. 455-457 et 464).

les régions montagneuses. Mais les terroirs, mis à part ceux des zones pionnières, semblent avoir été ouverts”<sup>52</sup>.

La clôture, certes, n'était pas totalement absente de ce paysage de la grande propriété. Une grande cour ou parc, enclos, devait exister, en particulier, au voisinage des bâtiments. C'était le *vestibulum* de la *villa*<sup>53</sup>. Dans certains cas<sup>54</sup> on ne sait si l'enclos courbe repéré sur les photos aériennes doit être rapporté à la *villa* gallo-romaine voisine, ou à un *aedificium* gaulois auquel elle aurait succédé. Mais c'est certainement à l'époque gallo-romaine qu'il faut attribuer des enclos quadrangulaires réguliers qui ont été observés autour d'autres *villae*<sup>55</sup>. Cette pièce de terre qui environnait les bâtiments devait être de vastes dimensions et il lui fallait un espace minimum pour répondre aux exigences tant de l'économie que de l'esthétique<sup>56</sup>. Ce sera encore, plusieurs siècles plus tard, le paysage de la grande exploitation de l'époque carolingienne, avec ses enclos (*curtis* et *curticula*) autour des bâtiments<sup>57</sup>.

De cette situation, il est d'ailleurs possible de retrouver l'écho dans les textes littéraires. Les bâtiments de la *villa* donnent sur des espaces plans et ouverts: *in plana patentiaque*<sup>58</sup>. C'est comme un *campus* qu'est décrit son terroir arable<sup>59</sup>, et l'on sait les connotations assez précises, d'espace ouvert de vastes dimensions, *patens et spatio suo porrectus*<sup>60</sup>, qui s'attachent de plus en plus au terme à l'époque de la basse latinité. Et cette mention de champs ouverts possède une valeur régionale quand Ausone parle des *campos...* *Santonicos*<sup>61</sup> sur l'auréole des calcaires crétacés de la Saintonge, que son vocabulaire distingue soigneusement des *Tarbellica... arva*<sup>62</sup>, paysage certainement plus discontinu et coupé des sables de Chalosse. C'est également un paysage uniformément ouvert que révèle la splendide image de Sidoine Apollinaire décrivant la Limagne<sup>63</sup>, cet “océan de blés”<sup>64</sup>: *illud aequor agrorum, in quo sine periculo quaestuosae fluctuant in segetibus undae*. Et lorsque Eumène, au début du IV<sup>e</sup> siècle, dans son discours d'actions de grâces à Constantin, évoque le paysage de la vallée de la Saône, au pied de la Côte d'Or, avant que les dévastations des barbares y aient apporté la ruine, c'est l'image de vallées ouvertes, *vallis patentibus*, qui viendra à son esprit<sup>65</sup>.

## CONSÉQUENCES DES INVASIONS GERMANIQUES SUR LE PAYSAGE RURAL

Ces aspects furent profondément perturbés par les dégradations de l'occupation du sol et par les transformations du régime foncier qui suivirent les in-

<sup>52</sup> G. Fournier, *op. cit.*, p. 324.

<sup>53</sup> Sidoine Apollinaire, *Epist.*, II, 2; VIII, 4.

<sup>54</sup> R. Agache, *op. cit.*, fig. 355.

<sup>55</sup> *Ibid.*, fig. 564.

<sup>56</sup> Cf. Sidoine Apollinaire, *Epist.*, II, 2, à propos de la villa d'Avitacus (Aydat, à 20 km au Sud-Ouest de Clermont-Ferrand): *donec domicilio competens vestibuli campus aperitur* — “avant d'atteindre l'endroit où s'ouvre un espace suffisant pour le vestibule d'une habitation” (trad. A. Loyer, Paris 1970).

<sup>57</sup> Voir la mise au point de G. Fournier, *op. cit.*, p. 202.

<sup>58</sup> Sidoine Apollinaire, *Epist.*, II, 9, pour une villa près d'Alès, sur les bords du Gardon.

<sup>59</sup> *Ibid.*, VIII, 4: *vestibulo, campo, colle amoenissimus*.

<sup>60</sup> Isidore de Séville, *Etymolog.*, XIV, viii, 23 (édit. Migne, *Patr. Lat.*, LXXXII, p. 212).

<sup>61</sup> *Epist.*, XIV, 2.

<sup>62</sup> *Ibid.*, XXIII, 125.

<sup>63</sup> *Epist.*, IV, 21.

<sup>64</sup> Trad. A. Loyer, *op. cit.*

<sup>65</sup> *Panegyriques*, VIII, 6. Pour l'identification du lieu, voir Landriot (Abbé) et Rochet (Abbé), *Traduction des discours d'Eumène*, Autun 1854, p. 312, note 4.



vasions du Bas Empire. On connaît les lignes directrices de cette évolution, marquée essentiellement par la diminution progressive de la réserve et le morcellement de l'exploitation. Il y avait certes à cela des antécédents d'époque romaine. A côté de la partie de la *villa* exploitée par les esclaves, la plus importante, d'autres secteurs étaient répartis entre des *coloni* ou des *servi casati*<sup>66</sup>. Mais jusqu'au III<sup>e</sup> siècle ce n'était qu'une portion restreinte. Le Bas Empire a vu cette part s'étendre. On a pu émettre l'idée que des centuriations de Picardie, dont la disposition ne présente aucune corrélation avec l'implantation des *villae* connues par la détection aérienne, seraient très tardives et postérieures aux grandes destructions de la seconde moitié du III<sup>e</sup> siècle, et qu'elles correspondraient sans doute à la tentative de remise en culture de terres abandonnées, probablement avec installation de Lètes, aux abords des voies romaines<sup>67</sup>. Cette évolution se précipitera ensuite, selon des modalités régionales variables: de façon partielle dans les régions soumises au régime du partage avec les peuples *federati et hospites*; plus brutalement et totalement dans les régions de conquête où une communauté barbare se substituera sans doute intégralement par expropriation au grand domaine antique. Si la *villa* carolingienne du Nord et du Nord-Est de la France laisse encore une part importante à la réserve, il semble bien ne s'agir là que d'une exception géographique localisée<sup>68</sup>. De toute façon, et sans qu'il soit question d'aborder le problème, très complexe et qui nous dépasse entièrement, de la continuité de la *villa* antique et du domaine médiéval, il est certain que le tableau offert par les rapports de la réserve et des manses (dès l'époque carolingienne implique une multiplication considérable des petites exploitations par rapport à l'époque gallo-romaine<sup>69</sup>.

Parallèlement s'est opérée une *transformation du paysage*. La prolifération des tenures a certainement conduit à celle des enclos. Et cela d'autant plus que la tradition de la société égalitaire des paysans germaniques, avec leurs *kämpen*, mobiles puis fixés, découpés dans la végétation naturelle et que la clôture devait protéger des menaces des troupeaux, était bien éloignée de celle des grands propriétaires de la Gaule Romaine. La marque s'en trouve dans l'ensemble des Lois Barbares, dont on extrairait sans peine une image du paysage rural bien différente de celle des recueils des *gromatici*<sup>70</sup>. A côté de termes directement empruntés à la tradition romaine<sup>71</sup>, on est frappé par la multiplication des mentions de haies (*sepes*) et des mesures pour leur protection. Que le développement des clôtures ait été un élément de l'apport culturel des Germains en Gaule, on en peut trouver une preuve philologique,

<sup>66</sup> Fustel de Coulanges, *op. cit.*, IV, p. 50-83.

<sup>67</sup> R. Agache, *op. cit.*, p. 203-204.

<sup>68</sup> A. Verhulst, La genèse du régime domanial classique en France au Haut Moyen-Age, *Settimane di studio del Centro italiano di studi sull'alto medioevo di Spoleto. XIII. Agricoltura e mondo rurale in occidente nell'alto medioevo*, Spolète 1966, p. 135-160.

<sup>69</sup> Analyses dans Ch.-E. Perrin, *Les classes paysannes et le régime seigneurial en France du début du IX<sup>e</sup> siècle à la fin du XIII<sup>e</sup> siècle*, Paris 1942, p. 32-77; G. Duby, *L'économie rurale et la vie des campagnes dans l'Occident médiéval*, 2 vols., Paris 1962, I, p. 100-129.

<sup>70</sup> Nous comptons donner par ailleurs cette analyse, qui dépasse le cadre de cet exposé. Voir provisoirement X. de Planhol, *Essai sur la genèse du paysage rural de champs ouverts*, p. 414-423 dans *Géographie et histoire agraires*, Nancy 1959 (Mémoire n° 21 des *Ann. Est*), cf. p. 417-418.

<sup>71</sup> Comme les *butinae aut mutuli* de la Loi des Ripuaires, XXXIV, 4; *butinae* est une corruption de *botontini* trouvée chez les *gromatici* et désigne des mottes de terre. *Mutuli* (en architecture: corbeau; ici: pierre dressée) est dans la *Lex parieti faciundo* (*Corpus inscriptionum latinarum*, X, 1781). Cf. Fustel de Coulanges, *op. cit.*, p. 111.



dans le fait que le mot français "haie" soit d'origine germanique (du francique *haga*; cf. Anglais: *hedge*; Allemand: *Hag*)<sup>72</sup>. Les enclos se sont ainsi généralisés peu à peu pendant le Haut Moyen-Âge. C'est alors, dans la seconde moitié du IX<sup>e</sup> siècle, que la mention de "clos" (*clausum*) devient fréquente pour désigner les vignobles<sup>73</sup>. Cependant l'évolution sera lente. Au IX<sup>e</sup> siècle le cartulaire de Redon révèle encore en Bretagne un paysage largement ouvert<sup>74</sup>. C'est plus tard encore sans doute, avec la fragmentation progressive des manse, que la densité des clôtures augmentera de façon décisive, et que le régime juridique des servitudes de clôtures atteindra son expression la plus complète<sup>75</sup>. Mais déjà la pression démographique des XI<sup>e</sup>-XII<sup>e</sup> siècles, avec ses conséquences sur la lanéation de la terre et l'extension des terroirs, portait en germe les mécanismes qui allaient conduire au développement du nouvel openfield organisé et réglé, fondé sur les pratiques communautaires, du Bas Moyen-Âge et des temps modernes.

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<sup>72</sup> Le fait a déjà été signalé, mais sans que la signification culturelle du phénomène soit discutée, dans A. G. Haudricourt et M. Jean-Brunhes Delamarre, *L'homme et la charrue à travers le monde*, Paris 1955, p. 48 et 338.

<sup>73</sup> Plus ancienne mention en 877 (G. Fournier, *op. cit.*, p. 298-299).

<sup>74</sup> A. Meynier, Champs et chemins de Bretagne, p. 161-178 dans *Conférences universitaires de Bretagne 1942-1943*, Paris 1943, cf. p. 170; A. Guilcher, Le finage des champs dans le Cartulaire de Redon, *Ann. Bretagne*, 1946, p. 140-144; P. Flatrès, Les anciennes structures rurales de Bretagne d'après le Cartulaire de Redon, *Etud. Rur.*, 41, 1971, p. 87-93.

<sup>75</sup> X. de Planhol, *op. cit.*, 1959, p. 418.

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## THE REGULATED VILLAGE IN NORTHERN ENGLAND: SOME PROBLEMS AND QUESTIONS

BRIAN K. ROBERTS

In England, within the last decade, enormous contributions have been made by economic historians, archaeologists and historical geographers to an understanding of the morphology of village settlements. It is gradually becoming clear that not only are there substantial variations in the degree to which plans can survive from the past, for recent excavations have revealed dramatic examples of both continuity and destruction, there can also be substantial temporal and regional variations in the degree of temporal plan stability or instability. Recent very welcome archaeological attention to village property boundaries in northern England, however, is at times producing evidence for quite remarkable stability, while an understanding of the vast time spans during which a given site can experience occupation, but not necessarily continuity, is making rapid advances.<sup>1</sup> This paper is concerned with work, partially published and partially in progress, upon villages in the three northern English counties, Durham, Northumberland and Cumberland. Within Durham it has proved possible to argue that marked plan regularities still visible today have their origins before 1200. There are problems of definition and classification, but comparative work has been possible by using the concept of *plan-elements*, seeing each village as an individual assemblage of distinct morphological entities, public space (public routeways and common greens) and private space, individual house plots (tofts and distinctive associations of tofts), together with special components such as the manor house (hall-garth) and church. These component parts can have distinctive individual histories, sometimes closely relating to that of the entire village, sometimes diverging substantially, but it is becoming clear that building plans change exceedingly rapidly, while property boundaries, particularly those between public and private space tend to be more stable. *Plan-elements* are grouped in a variety of ways to form a distinctive series of *plan-types*, defined in terms of three variables (Fig. 1): (1) the overall shape (basically either a row or an agglomeration), (2) the degree of regularity (a subjective measure, comparing reality with a geometric ideal) and (3), very definitely in third place, the presence or absence of an integral green. With the qualification that a regular agglomeration can be either a rectilinear grid or a radial figure, this provides ten basic plan-types which can be subdivided further, combined, or seen in terms of more precise parameters. The classification (which owes a debt to Professor M. R. G. Conzen, Dr. J. Sheppard and less directly Professor H. Uhlig) does two things: first, and most obviously, it permits plan-types to

<sup>1</sup> An important summary of evidence is to be found in M. W. Beresford and J. G. Hurst, *Deserted medieval villages* (1971), and in P. Sawyer, *Medieval Settlement* (1976).



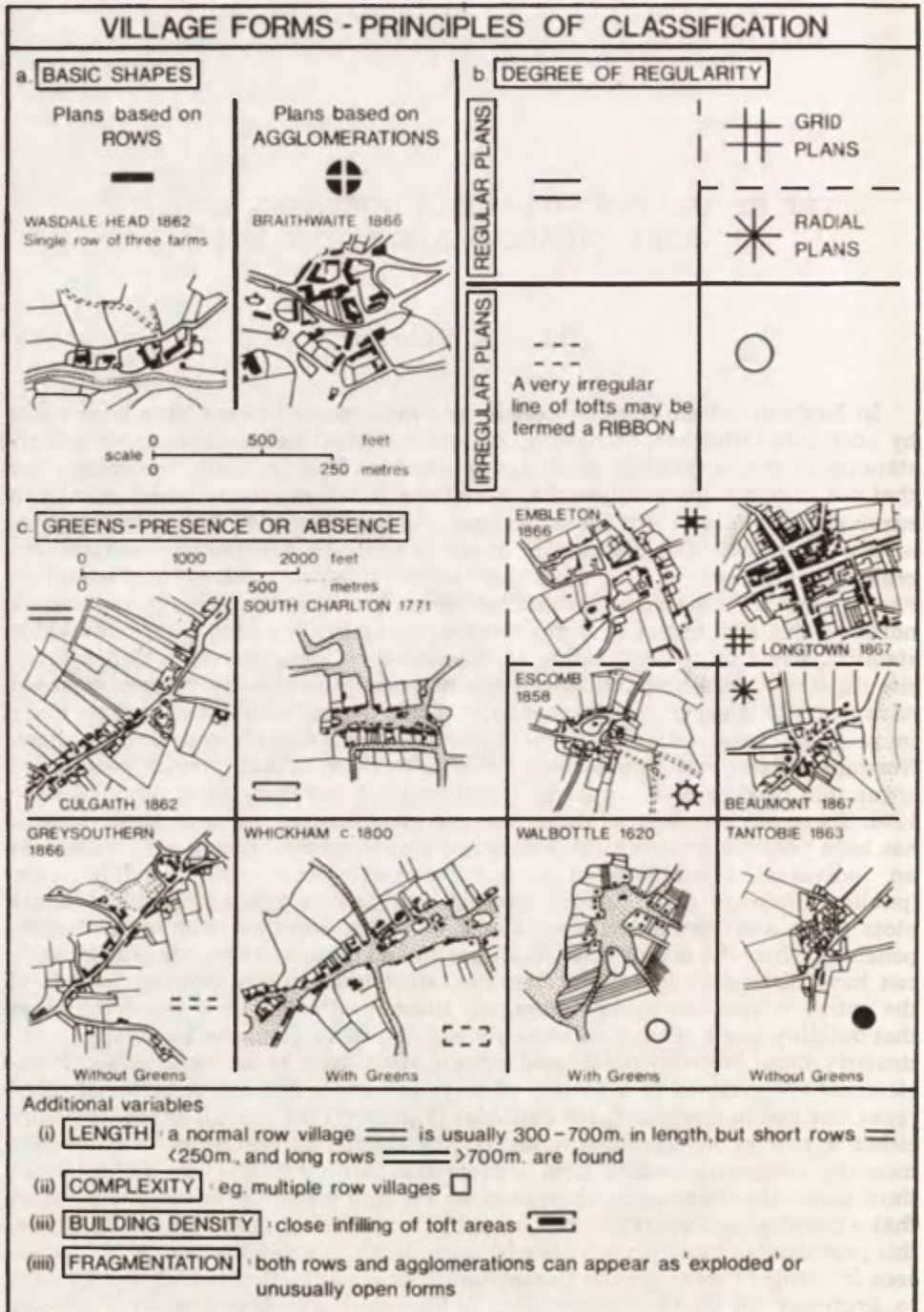


Fig. 1

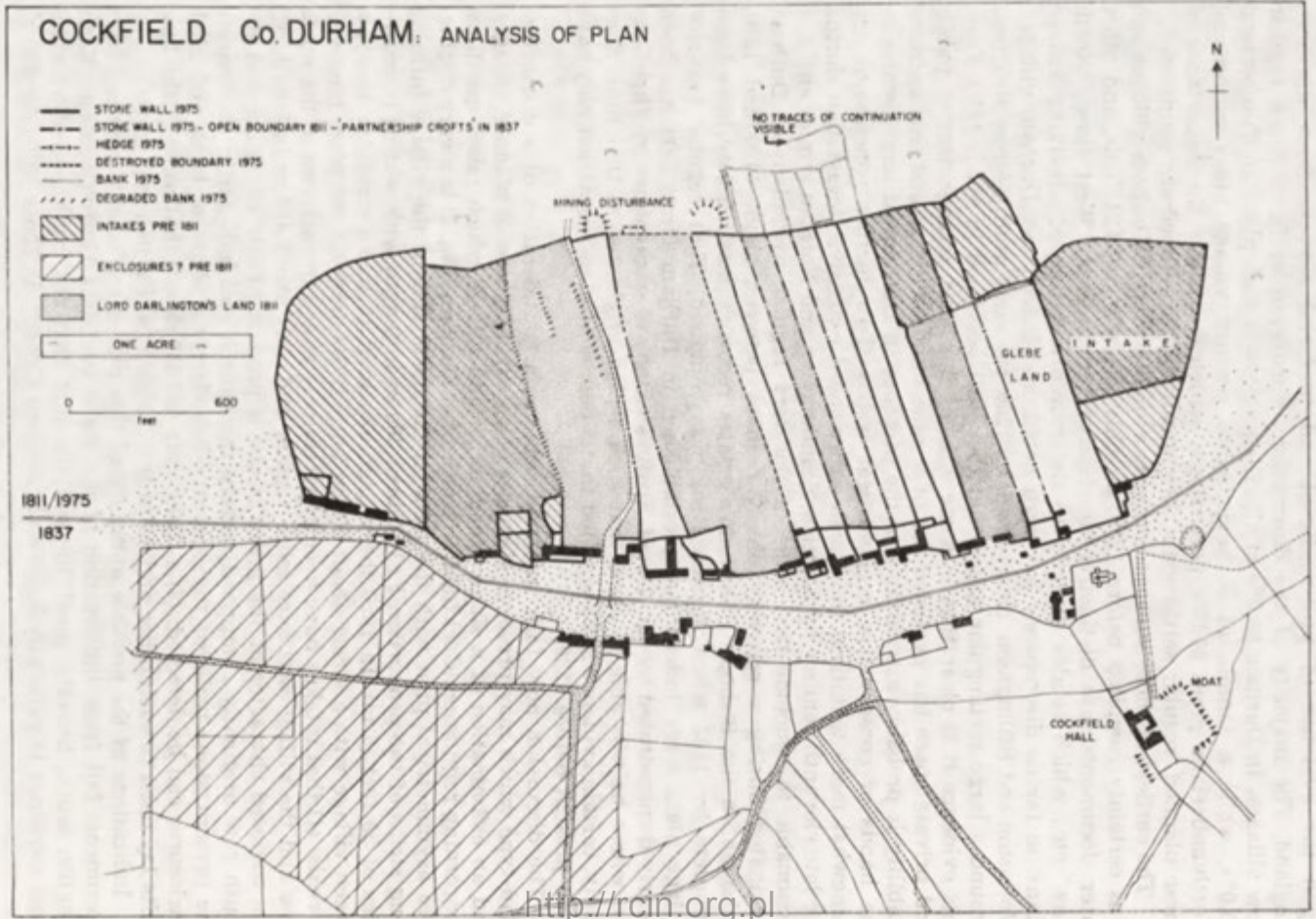
be mapped, using coded symbols, but more importantly, it is securely based upon the evidence of post-medieval and medieval surveys from northern England. The majority of the descriptions discovered so far concern regular row villages. In Durham 66.0% of all villages possess such plans, in Cumberland 65.0%, while a sample of 50 seventeenth century village plans concerning Northumberland gives 64.0%, percentages which emphasize the importance of these planned, regular settlements throughout the three northern counties.

The earliest of these surveys concerns a small group of Durham villages and was certainly compiled before 1200, possibly as early as 1128. This, and other later documents, use distinctive descriptive terminology, 'West Row', 'North Row' etc., which relates directly to the row orientation of surviving village plans: so far no discrepancy has been noted, and indeed two Durham villages, Wolviston and Billingham, clearly had, by 1200, the same multiple-row structure around a large rectangular green that they still possessed in about 1850. From this evidence it is clear that in some villages the basic arrangement of public and private space has persisted for over nine hundred years and this extreme stability is probably attributable to the presence in Durham of large estates in the hands of conservative ecclesiastical bodies. Two further conclusions are somewhat more tentative; the North experienced extensive devastation during the late eleventh century by Scottish, Scandinavian and Norman armies and it is reasonable to conclude that some of the very regular row plans of Durham originated during a recovery phase, perhaps between about 1130 and 1200, although on the Bishop of Durham's estates recovery may already have been complete by 1183 when Boldon Book was compiled. That regular two-row village plans were indeed being established in Durham *circa* 1200 has been clearly demonstrated by Mr. David Austin's extensive excavations at Thrislington where he was able to show that such a plan originated at that time. Secondly, certain evidence has suggested that a degree of plan-regulation may have been present before 1200.<sup>2</sup>

The discussion now falls into two sections, a consideration of a distinctive plan-type which may preserve elements of an earlier phase of planned villages, and an examination of a single Northumberland village which raises questions concerning regulation. Cockfield, in south west Durham (Fig. 2) is a very distinctive asymmetrical plan with the tofts on the north side of the village forming long strips of the proportion 1 : 10, about 300 m in length with widths in multiples of 20 feet (6 m). In 1850 the village appeared to be an irregular two-row green village with a street about 800 m long. Close study of the plan, however, reveals: (1) that intakes have been progressively added to each end of the north row and the village was once more regular and only about 400 m in length; (2) the enclosed character of the green is also a product of late enclosure and the south row originally comprised merely the church and hall-garth; (3) beneath the present stone walls of the property boundaries a phase of bank and ditch enclosures can be detected; (4) a Tithe map of 1837 shows that some of the long tofts lay open to each other and were then known as 'Partnership crofts'.

Indications of the possible antiquity of this plan come in this case not from documents but from the location of the glebe land (the church contains Early English work, broadly pre-1250) and the fact that the bank and ditch/stone wall sequence is generally known throughout County Durham to be medieval/

<sup>2</sup> A discussion of the classification is to be found in B. K. Roberts, 'The northern village: an archaeological perspective', in: D. W. Harding (ed.), *Archaeology in the North* (Northern archaeological survey, Durham 1975). The Durham evidence is treated in B. K. Roberts, 'Village Plans in County Durham: a preliminary statement', *Medieval Archaeology*, XVI (1972), pp. 33-56.



<http://rcin.org.pl>

Fig. 2



post-medieval in date. Nevertheless, at Killingworth, Northumberland, a survey of 1375 permits the reconstruction of such a plan (still visible on mid-19th century maps) while some 13th century charters from Northumberland clearly describe such 'long tofts'. It appears that the enclosure of these long strips can vary in date from the 13th to the 19th century. All of the settlements with this plan in Durham appear to have been in process of development during the twelfth and early thirteenth centuries and they most commonly found in the hill country of the west of the county. It appears probable that this plan-type, so different from the normal regular two-row villages of Durham, was used particularly during the breaking up of new land and while this layout may reflect this special function it may also preserve some elements of pre-Norman village planning. The long 'garden' plots which may have been used as infield strips were not as essential as further east in the county where re-colonization was dealing with former ploughlands and surviving if depleted villages. By 1200, on the Bishop of Durham's and Cathedral Priory's estates at least, re-development was well-advanced using villages with regular rows of short tofts, generally less than 150 m in length. It may be significant that in Cumberland, an area known to have been planted with Saxon colonists after 1092, this type of 'long-tofted' plan is particularly common. In the Cumberland village of Cumwhitton the church site and an associated glebe toft are seen on 17th century plans to have been intaken from a driftway: the church is Early English. In Hayton near Brampton, another Cumberland village, the church site shows signs of being superimposed upon a series of long tofts and, although no physical remains survive, because of drastic rebuilding in 1780, land was being granted to the church in the reign of Henry II (1154-1189) suggesting that the principal components of the plan may indeed reflect a foundation between 1092 and the mid-twelfth century. This hypothesis concerning the antiquity of this particular plan-type cannot be regarded as wholly proven, nor will it surprise Continental scholars, but this argument has a place in the face of a general and largely justified scepticism in England concerning the antiquity of surviving village plans.<sup>8</sup>

Some of the grounds for this scepticism are evident in the village of Acklington, Northumberland. From Acklington, and other villages on the Northumberland estates there is clear evidence for village regulation, i.e. a close association between plan regularity, the presence of regularly distributed and equal shares of arable and meadow resources, and the manner in which fiscal impositions upon the whole village were shared amongst its constituent farms. Acklington presented immediate difficulties of interpretation: it is clear that in about 1800 the entire village was replanned, *in situ*, preserving the orientation of the older plan but wholly destroying the earlier settlement. A schematic reconstruction of the village from a survey of 1616 has, however, been possible and from this and the field book it can be seen that in many furlongs the field strips fall in the same sequence as tofts in the village: this order is anticlockwise and strict regularity of order is not observed throughout all furlongs. Three distinct types of partition unit can be identified (Fig. 3) and when mapped it is notable that the most regular furlongs are peripheral to the arable and sometimes can be proved to be recent additions in 1616. The less regular sequences at the core of the arable may well contain traces of earlier arrangements.

<sup>8</sup> An air photograph of Cockfield is to be found in *Antiquity*, XLIX, No 193 (1975), pp. 48-50. The author is indebted to Lord Barnard for permission to consult an estate map of 1811 used in the compilation of Figure 3.

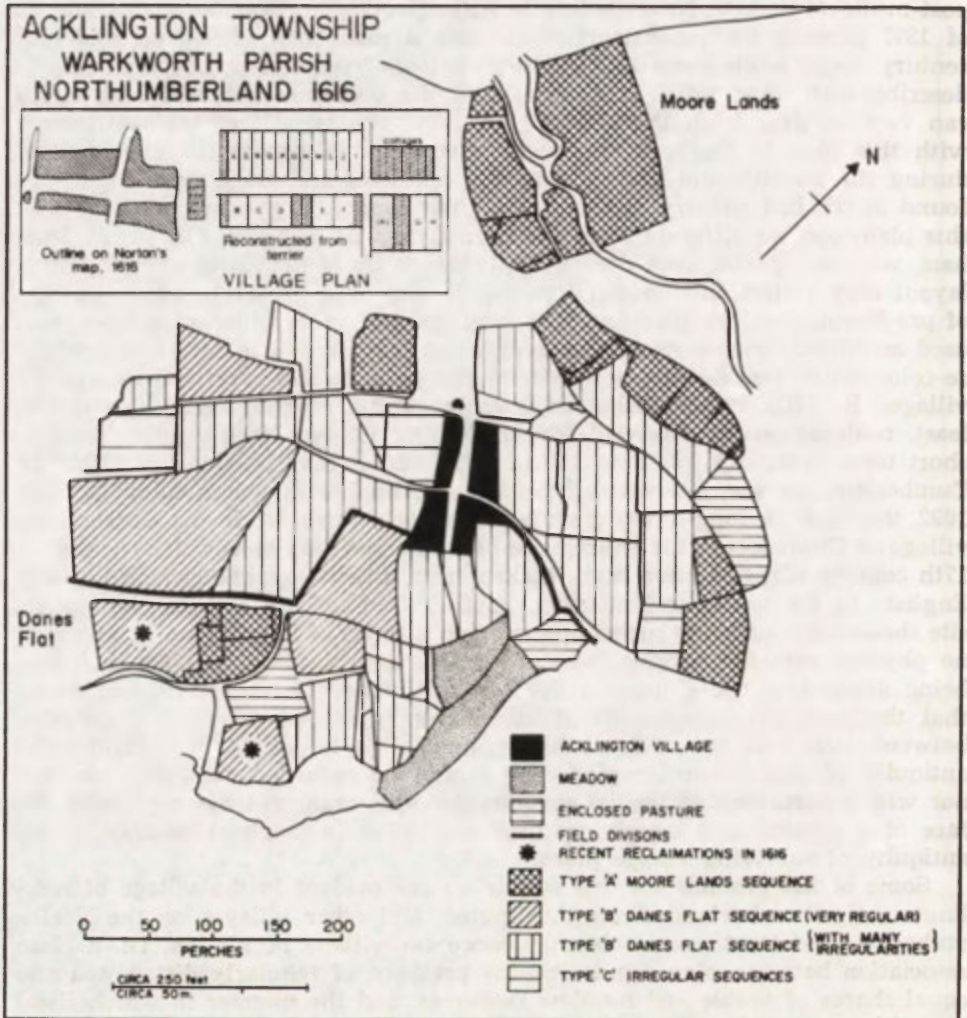


Fig. 3

Figure 4 (at the end of this paper) presents a summary of the evidence for the antecedents of the arrangements present in 1616 and although not free of inconsistencies, not to say contradictions, provides a useful picture:

(1) The village plan of 1616 is shown schematically along the central axis of the diagram. In 1616 there were  $17\frac{1}{2}$  farms, A to S, also numbered, each rated at two husbandlands (a holding of about 30 acres). These specific units can easily be traced back to 1567 using surveys which perambulate the village in house order.

(2) Between 1472 and 1498 a radical reorganization occurred and  $17\frac{1}{2}$  husbandlands were created from 35 husbandlands (each nominally 15 acres). This much is closely documented: the argument which follows cannot prove the toft-husbandland links that are postulated, but they seem very probable.

(3) Summary surveys in 1352 and 1368 each list 35 husbandlands, 9 lying waste. These 35 could well have been apportioned among the tofts in three







(5) Finally, a survey of 1248 raises some interesting questions: there were 21 bond tenants, ten 'farmers' (*firmarii*), 3 cottagers and a demesne. (If the figures 35 and 21 seem improbable there are indications that many villages near Alnwick possessed husbandland totals divisible by seven!). It is tempting, and no more than this can be said, to see the village of 1248 as a quartered settlement with four elements, demesne, cottagers, bondsmen and farmers. The tenant lands were expanded between 1248 and 1309 at the expense of the demesne; hence the eccentrically located husbandland tofts of 1616. This hypothesis can be tested as more material remains to be examined, but is worth noting that the 17<sup>1/2</sup> farms were still used in the late 18th century as the basis for parish rates.<sup>4</sup>

In summary, it is clear that many of the regular row plans in northern English villages originate before 1250, if not before 1200, but some row plans with long tofts may preserve the characteristics of an even earlier type of planned settlement. Medieval documents indicate the presence of regulation and detailed surveys suggest that many layers of reorganization can often be detected in a single village; the regular patterns of the 17th century, however, need not have direct medieval roots. Many questions remain to be answered: the chronological contexts of the plan-type families and their genetic inter-relationships need to be explored; the presence or absence of regulation, the contexts in which it appears and the chronology of its imposition and development must be considered; finally the degree to which conclusions arrived at in a northern English context can be applied in other regions needs to be assessed.

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<sup>4</sup> A published account of Acklington is to be found in E. Bateson (ed.), *History of Northumberland*, 15 vols (1893-1940), V, pp. 362-376. See also Alnwick Castle Mss. A.I.10, A.V.6, consulted by kind permission of the Duke of Northumberland. Figure 1 incorporates maps consulted and used by kind permission of the Duke of Northumberland (South Charlton and Walbottle), Northumberland County Record Office (Embleton), and the Mining Institute, Newcastle upon Tyne (Whickham). The remainder are based on Ordnance Survey 1st Edition 1:10,360 maps.

## LE RÔLE DES TECHNIQUES DANS L'ÉVOLUTION DES PAYSAGES VITICOLES D'EUROPE OCCIDENTALE

PHILIPPE ROUDIÉ

Dans la gamme des paysages agraires, les vignobles sont longtemps apparus comme stables, voire immuables: la vigne est une culture pérenne, qui vit longtemps, installée sur des territoires considérés empiriquement comme les meilleurs pour l'obtention d'un produit de choix. De plus l'attachement sentimental du vigneron à sa vigne fait que cette culture s'enracine au terroir.

Pourtant la géographie des vignobles n'est stable qu'en apparence: si les aires de la vigne sont fixées dans leurs grands traits, on assiste depuis la fin du XIX<sup>e</sup> siècle et surtout depuis une décennie environ à de profonds changements internes des zones viticoles. Plus que de déplacements géographiques des zones de viticulture, il s'agit de transformations dans les paysages qui sont pour une grande part dues à l'apparition souvent tardive mais déterminante d'impératifs techniques et financiers.

### L'ÉVOLUTION DES TECHNIQUES ET LEUR INFLUENCE SUR LES PAYSAGES VITICOLES

Dans la plupart des vignobles tous les travaux se faisaient autrefois à la main, les labours à la bêche en particulier. L'apparition de la charrue vigneronne dans de nombreuses régions viticoles, à l'imitation des pays céréaliers, fut en son temps une révolution agricole, car elle amena la généralisation des rangées de vigne entre lesquelles passaient désormais les boeufs ou le cheval: on vit ainsi s'amorcer un paysage viticole soigné, en longue règles à l'écartement presque uniforme (de 1 m à 1.50 m en général) au détriment des parcelles aux ceps de vigne désordonnés dits parfois plantation "en foule".

L'apparition du fil de fer, à partir du milieu du XIX<sup>e</sup> siècle en Bordelais par exemple, calibra encore davantage la plante: son élévation, son écartement sur les lignes furent alors beaucoup plus réguliers, facilitant par là même les travaux d'entretien, notamment la taille, voire la récolte. Le piquet de bois ("carassonne" en Bordelais) devint alors un élément essentiel. L'acacia était le meilleur bois; dur et difficilement putrescible, il faisait long usage. Aussi vit-on souvent se former des plantations d'acacias en bordure des vignobles. Il en alla de même pour les osiers (ou "vime") dont on avait besoin pour lier la vigne sur le fil de fer.

L'évolution contemporaine a essayé, souvent sans succès, de remplacer ces éléments par des produits plus modernes: le fil de plastique a parfois remplacé le fil de fer. On essaie aussi de remplacer les produits végétaux par des éléments fabriqués en grande série par l'industrie. Ainsi les piquets sont-ils par-



fois en métal (dans le nouveau vignoble corse par exemple) et les liens de la vigne des brins de plastique multicolore.

Le travail mécanique a eu une influence considérable sur le paysage viticole. Dans un premier temps c'est la machine qui s'est adaptée au vignoble: les tracteurs vigneron frappaient par leur étroitesse, pour passer entre les règes. Dans certains cas, en Médoc par exemple, le tracteur passe au-dessus de la vigne d'où son nom d'enjambeur. Mais dans des vignobles de moindre renommée où la tradition ancestrale pèse moins, on voit apparaître, dans les plantations nouvelles surtout, une mode de tenue de la vigne plus adaptée à la machine, notamment un écartement des pieds de vigne facilitant les labours et travaux motorisés avec les tracteurs tout venant.

Une étape suivante a consisté à améliorer les prix de revient du travail viticole par l'adoption de techniques nouvelles déjà implantées sur d'autres cultures, grandes spéculations céréalières ou cultures fruitières. C'est, par exemple dans le Sud-Ouest de la France et dans certaines parties du Bordelais en particulier, l'adoption de la vigne haute à la mode d'Europe centrale. Après la visite d'une délégation de viticulteurs girondins en Autriche dans les années 1960 (dans la région de Krems sur Danube), certains propriétaires pratiquèrent un nouveau mode de venue de la vigne: un rang sur deux fut supprimé et on eut ainsi une vigne large qui facilita le travail mécanisé. Puis on éleva beaucoup la plante d'où le nom de vigne haute. Les ceps, davantage écartés entre eux sur les rangs sont donc en bien moindre grande densité à l'hectare et ressemblent alors vraiment à des arbustes très fortement chargés en fruits. L'intérêt d'une telle technique consiste dans le gain de temps de travail, donc la diminution des frais de main-d'oeuvre. L'inconvénient est une augmentation du rendement qui pourrait nuire à la qualité du vin: aussi cette technique n'a-t-elle été adoptée que dans des secteurs de qualité moyenne (Entre-Deux-Mers girondin, vignobles d'Aquitaine centrale); apparue comme révolutionnaire, elle n'a touché qu'une faible partie du vignoble français.

Une technique plus récente, imitée de certaines cultures maraîchères (melons, fraises...) se répand de nos jours dans les vignobles de la France méridionale. C'est la culture des vignes sous plastique opaque. Les jeunes pieds émergent d'un film sombre qui a la longueur de la rangée de vignes et laisse par un étroit orifice pousser le cep. Seul le milieu du sillon entre les rangs est laissé à l'air permettant par là à la plante de s'alimenter en eau. Le rôle du plastique est en effet d'éviter l'enherbement, donc de limiter sinon de supprimer les labours et le travail très long des "cavaillons". Mais cette petite révolution qui fait apparaître un paysage nouveau est beaucoup trop récente pour qu'on connaisse avec certitude l'intérêt financier de l'entreprise et les résultats sur la qualité du vin. Il est d'ailleurs significatif que cette technique n'ait touché que des vignobles à haut rendement, notamment la région de Cognac.

C'est par contre de tout autre paysage qu'il s'agit dans les vignobles de très grand cru: la tenue de la vigne reste au contraire celle qu'elle a toujours été, fixée dans des traditions qui ont assuré son renom: c'est ainsi que les vignes du Médoc et des Graves en Bordelais restent toujours aussi basses au-dessus du sol (50 cm environ), mais les techniques les plus récentes contribuent cependant à en faire des paysages où le génie inventif de l'homme se marque au moins temporairement, notamment dans le domaine très particulier de la protection. En Champagne, par endroits aussi dans d'autres crus européens, on craint maintenant les oiseaux, les étourneaux en particulier: aussi revêt-on le vignoble de filets légers qui emprisonnent curieusement les rangées. En fait c'est surtout dans le domaine de la protection contre les maladies et surtout les méfaits climatiques que s'est porté le travail des hommes. Les traitements chi-



miques généralisés depuis les crises de l'oïdium et du mildiou sont maintenant envisagés avec des moyens mécaniques puissants, pulvérisateurs et même hélicoptères. La trop grande sécheresse a fait apparaître des vignobles irrigués dans les nouveaux mondes (vignobles californien et australien de la Vallée du Murray) (A. Huetz de Lemps 1969) ou arrosé (Valais suisse) (J. Loup 1965). Le risque de trop grosses averses dangereuses pour le sol a amené la construction de rigoles pour l'évacuation rapide de l'eau ("peu de gall" dans le vignoble catalan français de Banyuls) ou de drains souterrains (en poterie puis en plastique) dans les châteaux girondins par exemple. Le gel est en définitive l'aléa le plus redouté. A l'imitation de ce que l'on fait pour les cultures fruitières, on se met maintenant à la protection du vignoble par le chauffage au mazout ou par l'aspersion d'hiver. Dans un cas, le château Giscours en Bordelais, une étendue d'eau artificielle a été creusée pour permettre la venue d'un microclimat atténuant les gelées printanières.

Mais tous ces travaux demandent des investissements considérables que seuls les hauts cours du vin justifient. Aussi n'est-ce que dans les très grands crus que l'on voit s'implanter ces nouvelles techniques dont l'influence sur le paysage viticole se marque surtout par un style de travail tout à fait nouveau: l'occupation du sol par la plante reste très traditionnelle, dans ses moindres détails parfois, mais l'intervention de l'homme au contraire fait apparaître temporairement un matériel et des techniques très élaborés.

#### LES TRANSFORMATIONS DE CERTAINS TERROIRS VITICOLES

Cependant il est bien des vignobles qui se sont complètement transformés en raison d'impératifs techniques. Ceux-ci ont en effet amené l'abandon pur et simple de certains terroirs à vigne qui demandaient trop d'efforts financiers pour pouvoir survivre. La liste des vignobles disparus serait longue. On se bornera à en citer deux: les terrasses méditerranéennes ou les zones montagneuses qui requéraient une main-d'oeuvre nombreuse. En France la viticulture de montagne, et même de pente (sauf sur des adrets très privilégiés par le climat), a-t-elle pratiquement disparu (vignobles Cévenol, Ariégeois, Quercynois) au profit de vignoble de plaine où le travail mécanique est possible et l'entretien plus facile.

C'est un même souci de facilité qui préside à l'amenuisement, voire à la disparition, des vignobles complantés, ou de culture mixte. Dans le Sud-Ouest de la France, il ne subsiste pratiquement plus de "joualles" (D. Faucher 1962) qui pourtant étaient largement répandues en Agenais, Périgord, Quercy, et même Bordelais. Le principe en était simple: des cultures intercalaires variées (céréales, légumes, bandes d'herbe même) s'inséraient entre les rangées de vigne. La nécessité des traitements chimiques, puis l'apparition de la machine, ne serait-ce que pour les labours, a fait disparaître ces cultures au profit de vignes en plein. De même ont disparu les arbres fruitiers au milieu des ceps, pêchers, pruniers ou cerisiers...

L'adoption de techniques modernes de culture a donc fait évoluer le paysage viticole. Dans le cas de vignobles de grande renommée, des travaux spectaculaires ont remodelé complètement le terroir.

Pour subsister, il fallait évoluer dans le sens des techniques les plus modernes et rentabiliser une culture que les frais de main-d'oeuvre sans cesse en augmentation tendaient à rendre peu lucrative. A cet égard le remodelage foncier est souvent apparu comme nécessaire. Mais le remembrement en zone viticole est difficile: chaque propriétaire tient à sa parcelle avec ses particularités géologiques et microclimatiques, ses vignes de tel cépage, de tel âge...

De plus la dispersion des parcelles correspondait souvent à une logique climatique: les risques de perte totale par la grêle ou le gel étaient amoindris. Aussi le remembrement a-t-il été beaucoup plus tardif en zone viticole qu'ailleurs; mais il y a été sans doute plus spectaculaire par l'importance des travaux mis en oeuvre et les résultats. Les meilleurs exemples sont sans doute fournis par les vignobles allemands et luxembourgeois où de très gros moyens financiers ont permis des travaux très importants. Dans le village franconien d'Iphofen par exemple (J. Justamon 1970) le remembrement du vin de Julius Echterberg a fait apparaître un grandiose paysage de pente totalement viticole mais le coût de l'opération se montait en 1969 à 88 500 Deutschmark à l'hectare.

En France certains secteurs du vignoble jurassien de Château-Châlon, du vignoble de Sancerre et du Layon en pays de Loire en montreraient aussi des exemples. En Bordelais, où le remembrement fut très lent à démarrer, c'est une soixantaine de communes qui ont réussi l'opération, notamment en Entre-Deux-Mers central et oriental, de 1960 à 1975, dans un périmètre couvrant près de 60 000 hectares.

Dans d'autres secteurs la terre à vigne vaut si cher que l'on s'efforce de gagner le moindre lopin de terre ou d'en faciliter le travail. En Champagne, dans quelques secteurs du Bordelais (Saint-Emilion), on gagne des surfaces par des défrichements de petits bois, voire par le creusement de quelque abrupt. Mais les modifications les plus spectaculaires viennent du nouvel aménagement des terrasses du vignoble catalan français ou du Haut-Douro portugais: les très hauts prix garantis à la production des Banyuls et surtout des Porto firent que l'on avait intérêt à accumuler travail et techniques dans un milieu pourtant difficile. L'essentiel a consisté dans l'élargissement des terrasses qui facilitent tous les travaux de la vigne.

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Les paysages viticoles sont tout aussi variés que les autres paysages ruraux et malgré la pérennité de la plante sont tout aussi mobiles. Les techniques qui ont beaucoup évolué en viticulture ont contribué à renforcer l'opposition entre vignobles de grand vin et vignobles à vin courant: dans les derniers les modifications techniques ont cherché à augmenter les rendements et à rentabiliser au mieux la culture. Dans les vignobles de haute renommée les techniques ont cherché à protéger une production qui parfois vaut de l'or, et à ne négliger alors aucun sacrifice.

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## L'HABITAT RURAL EN PODLACHIE D'AVANT LA PÉRIODE DE LA RÉFORME DE MANSE (AVEC PRISE EN CONSIDÉRATION PARTICULIÈRE DE SA PARTIE SUD-EST)\*

JANINA SZEWCZYK

Le réseau de l'habitat en Podlachie s'est formé dans ses contours essentiels avant la moitié du XVI<sup>e</sup> siècle<sup>1</sup>. À cette période il existait déjà 25 villes, dont 13 avaient obtenu les droits urbains avant l'année 1500<sup>2</sup>. La réforme agraire et économique que les derniers Jagellons ont introduit dans les domaines royaux sous le nom de l'arpentage en manses (*pomiara włóczna*) a laissé une empreinte essentielle sur la structure et les formes de l'habitat rural de cette région. Suivant l'exemple royal, les propriétaires de domaines privés ont introduit aussi la même réforme.

Il n'y a aucun doute que la réforme sus-mentionnée appartient aux plus grandes entreprises dans l'histoire de l'économie européenne de cette période. Les espaces immenses du Grand Duché de Lithuanie, y compris le territoire de la Podlachie limitrophe, ont été soumis à une transformation profonde du régime économique et social et à une réorganisation essentielle de l'aménagement territorial de la campagne. Quant à la Podlachie, elle appartenait à l'État lithuanien, à l'exception d'une courte période à la charnière du XIV<sup>e</sup> et XV<sup>e</sup> siècles, jusqu'au moment de l'incorporation de cette région à la Pologne en 1569.

Les résultats de ladite réforme ont survécu plusieurs siècles sur le territoire de la Podlachie. Dans le paysage rural de cette région demeurent encore aujourd'hui les villages à une seule rue, formés en rectangles réguliers par l'arpentage en manses. Même le régime triennal des cultures prévalait encore récemment dans beaucoup de contrées de cette région. On peut reconnaître dans le terrain encore aujourd'hui les vestiges de l'emplacement des champs, caractéristique pour le système triennal.

La réforme de manse ne constituait pas un acte unique. Les premiers changements de l'ancien système économique en faveur de l'économie intensive, sous forme de la réserve seigneuriale basée sur la corvée, apparaissaient en Podlachie

\* Dans ce rapport j'identifie la Podlachie avec la voïévodie de Podlachie annexée en 1569 à la Couronne de Pologne, après la défection en 1566 des deux districts de Brześć (Briest) et de Kamieniec.

<sup>1</sup> J. Wiśniewski, historien de cette région, a présenté le niveau de l'habitat sur ces terres à la fin du XV<sup>e</sup> et au cours du XVI<sup>e</sup> siècle dans l'oeuvre: *Rozwój osadnictwa na pograniczu polsko-rusko-litewskim od końca XIV do połowy XVII w.* (Développement de l'habitat aux confins polono-russo-lithuaniens de la fin du XIV<sup>e</sup> jusqu'à la moitié du XVII<sup>e</sup> siècle), *Acta Baltico-Slavica* 1, Białystok 1964, et dans d'autres du même auteur.

<sup>2</sup> S. Alexandrowicz, *Powstanie i rozwój miast województwa podlaskiego (XV w.–I poł. XVII w.)* (Origine et développement des villes dans la voïévodie de Podlachie [XV<sup>e</sup> s.–1<sup>ère</sup> moitié du XVII<sup>e</sup> s.]), *Acta Baltico-Slavica* 1, Białystok 1964, p. 138–140.



déjà au XV<sup>e</sup> siècle. Ce processus s'amplifiait durant la 1<sup>ère</sup> moitié du XVI<sup>e</sup> siècle. Mais ce n'est que le décret fondamental du roi Sigismond Auguste de l'année 1557 qui a servi de base légale aux réformes de grandes envergures dans tous les domaines royaux. L'accent final de cette réforme constituait le contrôle de la réalisation de toutes les dispositions dudit décret dans tous les domaines. Les réviseurs nommés exprès pour ce but ont assuré le contrôle, en principe dans les années 1561-1572.

Les nouvelles formes d'une économie plus rentable, celle du fermage, basées sur les modèles occidentaux, ont été introduites en Lithuanie par l'intermédiaire de la Pologne. Elles sont venues en Podlachie, qui voisinait directement à la Pologne, beaucoup plus tôt que dans les autres territoires du Grand Duché de Lithuanie. Comme on a déjà sus-mentionné, en Podlachie apparaissait parfois déjà au XV<sup>e</sup> siècle et plus souvent au début du XVI<sup>e</sup> siècle le nouveau modèle de l'économie rurale et par conséquent la nouvelle unité de surface des champs, appelée *włóka* (manse). D'autre part, comme je le prouverai d'ailleurs dans la suite de mon rapport, le terme *włóka* ne présentait pas dans cette période initiale toujours le même contenu.

S'il s'agit des domaines royaux, on a commencé le passage planifié au système de *włóka* (de manse) dans les années 30 du XVI<sup>e</sup> siècle. L'action était menée par étapes, en arpentant en *włóki* (manses) successivement tous les domaines de chaque "starostie" (ensemble de domaines royaux).

La première moitié de ce siècle était donc une période de transition où l'on n'avait pas encore réussi à réaliser entièrement, ni dans tous les domaines royaux, le programme projeté des réformes. De vieilles institutions économiques et sociales continuaient donc à exister à côté des formes nouvelles, ainsi que de vieilles structures locales provenant parfois même des temps de l'économie tribale.

On peut reconstituer assez fidèlement en vertu des documents d'époque conservés jusqu'à présent, les relations économiques et sociales de la campagne de Podlachie au temps d'avant la réforme. Les inventaires des domaines royaux renferment des informations particulièrement précieuses à ce sujet.

Beaucoup plus compliqué est le problème de la reconstruction de l'emplacement des habitats ruraux. Le manque de matériaux cartographiques de ladite période rend cette tâche très difficile vu que les sources écrites ne transmettent aucunes données topographiques directes concernant les limites des villages, l'emplacement des demeures sur le terrain d'exploitations particulières, ni la disposition de leurs champs.

Dans les "starosties" de Mielnik et de Łosice, situées dans la partie sud-est de la Podlachie<sup>3</sup>, le registre de l'arpentage en manses n'a été dressé qu'en 1560<sup>4</sup>. Néanmoins, dans les trois inventaires précédents des villes de Mielnik et de Łosice ainsi que des villages (à l'exception de deux) de ces domaines, les *włóki* y figurent déjà. Deux de ces inventaires ont été dressés en 1546 et en 1551<sup>5</sup>. Le troisième par contre n'est pas daté<sup>6</sup>, mais on peut établir en vertu de beaucoup

<sup>3</sup> À présent, après la réalisation en Pologne de la division administrative à 2 degrés de l'État qui est entrée en vigueur le 1<sup>er</sup> juin 1975, l'ancienne "starostie" de Mielnik se trouve dans les nouvelles limites de la voïévodie de Białystok, tandis que le territoire de l'ancienne "starostie" de Łosice appartient à la nouvelle voïévodie de Biała Podlaska.

<sup>4</sup> Les inventaires manuscrits de la "starostie" de Mielnik et de celle de Łosice se trouvent dans *Archiwum Główne Akt Dawnych* (Archive National de Documents Anciens) à Varsovie, ASK LVI M2 I, feuille 706 r[ecto]-812 r.

<sup>5</sup> *Ibidem*, f. 590 r-f. 705 v[erso]. L'ordre successif de reliure des inventaires dans le volume est à rebours. L'inventaire de 1551 est relié d'abord et après celui de 1545.

<sup>6</sup> *Ibidem*, f. 813 r-931 r.

d'informations y intercalées et de faits relatés qu'il a été dressé peu de temps après l'année 1530. Il serait donc le plus ancien et le plus instructif pour le problème soulevé. Il concerne 19 villages (11 dans la "starostie" de Mielnik et 8 dans celle de Łosice), ainsi que les villes mêmes de Mielnik et de Łosice.

Malgré que dans toutes ces agglomérations (à l'exception des villages de Zerczyce dans le domaine de Mielnik, et de Łobki dans celui de Łosice) on a déjà mentionné *włóki*, il y a quand même des preuves incontestables que cette dénomination ne définissait pas encore la stricte unité de surface de champs, unifiée par le pouvoir central, vu que dans chacune de ces localités on a enregistré le semis de blé<sup>7</sup> par *włóka* qui oscille de 2 à 12 barils à sel. Dans 10 localités de ces domaines apparaissent en même temps des valeurs différentes du semis de blé comptées par la surface de champs appelée *włóka*. Même en prenant en considération les différences de la qualité du sol, la différence de la quantité du blé semé par une *włóka* est trop grande pour qu'on puisse admettre qu'il s'agissait vraiment dans cet inventaire de l'unité standard d'arpentage unifié de surface que constituait la *włóka*.

Souvent, dans l'addition des surfaces de terres dans certains villages, on répète la remarque que dans un tel village il y a tant de "services de manse" établis. Parfois même dans les villages où l'on a arpenté les soi-disantes *włóki*, apparaissent à l'occasion des exploitations particulières les annotations telles que p. ex. dans le village Korczówka du domaine Łosice: „*Ziemie nie mierzonej ma pod sobą «pół włóki»<sup>8</sup>, na której sieje żyta trzy solanki*" (il dispose d'un demi de *włóka* de terre non arpentée, où il sème 3 barils à sel de seigle). Surtout deux villages de Moszczona et de Borsuki du domaine Mielnik nous fournissent des arguments irréfutables. Nous lisons ce qui suit dans le plus ancien inventaire concernant le village de Moszczona: "*W tem siele w Moszczoney wymierzonych włók 30, ale jeszcze nie wszystkie osiedli*" (dans le village de Moszczona on a arpenté 30 *włóki*, mais tous ne sont pas encore occupés). Dans l'inventaire suivant de l'année 1545 on a déclaré aussi 30 *włóki*, mais dans celui de l'année 1551, donc plus tard, on n'a relevé que "30 hommes de services" avec une remarque concluante: "*Pod tymiż ludźmi siola Moszczyńskiego ziemia na włóki nie mierzona*" (sous ces gens du village de Moszczona la terre n'a pas été arpentée en manses).

Une situation analogue apparaît à Borsuki. Dans les deux premiers inventaires on a déclaré dans ce village 13 *włóki* (manses), mais en 1551 seulement 13 *szluzb* (services) et l'on a noté que les champs de Borsuki n'ont pas encore été arpentés en manses.

L'exemple de deux "starosties" présentées ci-dessus nous autorise à constater que les *włóki* n'étaient pas — avant la publication du décret général du 1557 — arpentés strictement à l'aide d'une technique basée sur les mathématiques, ou du moins que celle-ci n'était pas toujours appliquée. En tout cas, il en était ainsi dans les "starosties" en question. Le soupçon s'impose qu'ici on appelait *włóki* les anciennes unités économiques d'impôts, très différenciées du point de vue de leur surface.

Cette opinion est confirmée par le fait qu'après avoir arpenté d'une façon compétente les terres en 1560 [conformément à la formule: 1 *włóka* (manse) = 30 arpents à 30 perches; une perche étant égale à 7,5 aunes] on a relevé dans chaque localité beaucoup plus de *włóki* (manses), parfois leur nombre double et

<sup>7</sup> Dans l'inventaire on a employé l'expression "seigle" (*żyto*) mais elle signifiait toujours "blé" (*zboże*) dans la langue ancienne polonaise et dans la langue biélorusse, langue officielle de la chancellerie du Grand Duché de Lithuanie. Le mot "seigle" était déterminé par le mot *reż* (biélorusse *roż*).

<sup>8</sup> La distinction est de nous, J. S.



en 5 cas même plus. Seulement à Żerczyce le nombre de 154 *włóki* mis en évidence en 1551 a diminué après la réforme de l'année 1560 au nombre de 100 *włóki*, c.-à-d. de 35,00%.

Le plus ancien inventaire de ce village appartenant à la "starostie" de Mielnik nous présente donc clairement l'état de choses à l'année où il avait été dressé. Le village continuait à exister dans les mêmes conditions sociales, économiques et celles de l'aménagement territorial tout à fait inchangées encore par la réforme de manse. Ce village peut donc servir de base pour certaines généralisations concernant l'habitat rural au temps d'avant la réforme.

L'aire du village dans la période précédente au plus ancien relevé comptait 7 *żrebia* (lat. *sortes*). L'information suivante est incorporée justement dans cet inventaire: "*W tem siele Żyrczyczach bylo ziarebiow siedm, a z tych siedmiu ziarebiow wymierzono pięćdziesiąt służeb*" (dans le village de Żerczyce il a avait 7 *żrebia* [sortes] et de ces 7 *żrebia* on a arpenté 50 *służby* [services]). On peut déduire de cette remarque que le partage en *służby* y a été introduit à l'époque relativement récente. Le *żreb* (lat. *sors*) a été une unité économique d'impôts dont la surface n'était pas exactement établie<sup>9</sup>. Il résulte de l'arpentage du village en 1560 en 100 *włóki* qu'à Żerczyce le *żreb* avait les dimensions assez importantes, dépassant même 14 *włóki*<sup>10</sup>.

Le *żreb* a été transféré en Podlachie de la Pologne où il existait déjà au XIII<sup>e</sup> siècle et dont l'équivalent latin *sors* a apparu même au XII<sup>e</sup> siècle<sup>11</sup>. Le partage en *służby* était par contre une formation locale lithuanienne et biélorusse qui n'était appliquée que dans les limites du Grand Duché de Lithuanie. H. Łowmiański, éminent chercheur des relations sociales et économiques de l'ancienne Lithuanie, suppose que cette unité était déjà née aux temps païens sur les territoires ethniques du Duché Lithuanien<sup>12</sup>. Le duc Witold devait l'introduire au XV<sup>e</sup> siècle dans les territoires russes de l'État lithuanien.

Le terme de *służba* (service) constituait d'abord une expression fiscale, renfermant toutes les redevances dues par la famille paysanne en faveur du seigneur. Avec le temps il y a eu un décalage de la signification de cette expression sur l'exploitation elle-même qui devait acquitter une somme bien définie de redevances<sup>13</sup>. C'était donc d'une façon analogue comme le *żreb* (lat. *sors*) une unité économique d'impôts. Elle ne constituait pas non plus de surface territoriale interchangeable. Les familles paysannes qui se multipliaient au cours du temps évitaient le partage des terres en *służby* indépendantes, mais le nombre de feux et d'exploitations appartenant aux membres d'une même famille augmentait sans cesse dans le cadre de l'unité primitive. On évitait de cette façon les charges causées par une assiette séparée de redevances.

<sup>9</sup> J. Szewczyk, *Włóka, pojęcie i termin na tle innych średniowiecznych jednostek pomiaru ziemi* (Włóka, notion and term considered on background of medieval units of measure), *Prace Geogr. IG PAN* nr 67, Warszawa 1968, p. 16-18.

<sup>10</sup> A. Wawrzyńczyk, *Rozwój wielkiej własności na Podlasiu w XV i XVI wieku* (Développement de la grande propriété foncière en Podlachie au cours du XV<sup>e</sup> et XVI<sup>e</sup> siècle), Wrocław 1951, p. 153-160. Il y relate beaucoup d'exemples sur les valeurs très différentes du *żreb* (*sors*) en Podlachie, à savoir de celle de 2 à plus de 20 manses.

<sup>11</sup> J. Szewczyk, *op. cit.*, p. 16.

<sup>12</sup> H. Łowmiański, *Uwagi w sprawie podłoża społecznego i gospodarczego Unii Jagiellońskiej* (Remarques sur le fond social et économique de l'Union des Jagellons) repr. du: "Księga pamiątkowa ku uczczeniu czterechsetnej rocznicy wydania pierwszego Statutu Litewskiego" (Livre commémoratif du 400-aire de la publication du premier Statut de Lithuanie), Wilno 1934, p. 87-90.

<sup>13</sup> H. Łowmiański, *Początki Polski. Z dziejów Słowian w I tysiącleciu n.e.* (Origines de la Pologne. De l'histoire des Slaves dans le 1<sup>er</sup> millénaire de notre ère), Vol. III, Warszawa 1967, p. 356.



Voilà l'état de choses que nous rencontrons à Żerczyce après l'année 1530. Des 50 *szuźby* arpentés dans ce village il n'y avait à peine que 4 *szuźby* à un feu et à une exploitation non divisés. Dans d'autres *szuźby* il y avait plusieurs feux et plusieurs exploitations pour chacun, dont 62,0% constituaient les *szuźby* comptant de 3 à 5 feux et autant exploitations. Les *szuźby* avec un plus grand nombre de feux et d'exploitations étaient beaucoup plus nombreux. Dans 5 cas il y avait 6 feux et exploitations pour une *szuźba*, dans 2 cas il y avait 7 feux et exploitations pour une *szuźba*. Il y a eu un qui comptait 8 feux et 8 exploitations et dans un cas on a même noté 13 feux et 13 exploitations pour une *szuźba*. En somme, dans ce village il y avait 201 feux et 200 exploitations. La différence entre ces deux nombres se traduit par le fait que dans un cas deux frères ayant deux foyers séparés exploitaient en commun la même terre. Comme il en résulte la *szuźba* était donc unité très inégale et le nombre de feux et d'exploitations n'y jouait pas de rôle essentiel.

L'inégalité des *szuźby* apparaît encore plus évidente si l'on prend en considération la surface des exploitations agricoles. À Żerczyce la surface des terres était mesurée dans cette période uniquement par la quantité de semis. Cette mesure ainsi que le système de définir la surface arable par le temps nécessaire du travail humain appartiennent aux plus archaïques<sup>14</sup>. À Żerczyce on semait de 0,5 à 10 barils à sel de blé dans une exploitation. Mais les petites exploitations de 1 à 4 barils prévalaient d'une façon décisive. Le nombre de telles exploitations a atteint même 179 c.-à-d. 89,5% de toutes les exploitations dont les plus nombreuses étaient celles d'un baril (70 cas = 35,0%) et celles de 3 barils (41 cas = 20,5%). On semait à Żerczyce en tout 503 barils dans 200 exploitations. Donc pour une *szuźba* il échouait de 4 à 22 barils de semis de blé, selon la grandeur des exploitations y appartenantes. Nous avons donc ici la situation analogue à celle des villages où figuraient les unités appelées *włóki*.

Puisqu'il résulte de l'analyse des inventaires que le territoire du village n'a subi aucun changement jusqu'en 1560, il faut admettre la valeur de 503 barils à sel de blé du plus ancien inventaire, semés sur 100 *włóki* arpentés ici pendant la réforme. En cette proportion, en arrondissant pour simplifier le nombre des barils à 500, 1 *włóka* serait égale à 5 barils de semis.

Mais il y a ici deux éventualités qu'il faudrait examiner attentivement. Dans la littérature actuelle on admet qu'un baril de semis correspond à peu près à la surface d'un arpent. Downar-Zapolski<sup>15</sup> a initié cette opinion qui a été confirmée par l'autorité de H. Łowmiański<sup>16</sup>. Mais le rapport d'un baril égal à un arpent est en contradiction avec le cas de Żerczyce où 5 barils correspondent à la surface d'une *włóka* de 30 arpents. Cette relation présente encore toujours un équivoque. On ne sait pas notamment si l'on doit diviser par 5 la surface totale de *włóka* en arpents (1 baril serait dans ce cas égal à 6 arpents) ou — en prenant en considération le système de l'assolement triennal — diviser par 5 seulement le tiers de la *włóka* c.-à-d. 10 arpents. Dans le second cas, le semis d'un baril correspondrait à deux arpents de terre.

Aucune de ces éventualités ne trouvant sa solution dans les données documentaires, il faut essayer de résoudre le problème par la voie de raisonnement. Je prends comme prémisse que le nombre de barils dans les exploitations agricoles concernait le total de leurs terres et non pas le semis unique dans le système de culture triennale. Donc, 1 baril serait égal à 6 arpents de terre.

<sup>14</sup> W. Kula, *Miary i ludzie* (Mesures et hommes), Warszawa 1967, p. 51-76.

<sup>15</sup> M. W. Downar-Zapolski, *Gosudarstwiennoje choziajstwo Wielikogo Kniażestwa Litowskogo pri Jagiellonach* (Economie nationale du Grand Duché de Lithuanie sous les Jagellons), Vol. I, Kijów 1901, p. 215.

<sup>16</sup> H. Łowmiański, *Uwagi...* (Remarques...), p. 90, ann. 160.

Cette thèse est confirmée par le fait qu'à Żerczyce il y avait 35,0% d'exploitations à un baril. En admettant pour elles la surface de 2 arpents on obtiendrait des exploitations tout à fait naines et pourtant elles assuraient l'entretien aux familles de plusieurs personnes, malgré les redevances assez importantes en nature dont on parlera encore plus loin. Dans cette situation, une exploitation de 6 arpents, malgré qu'elle ne garantissait aucune aisance, est beaucoup plus acceptable comme base de survivance d'une famille.

Le cas de Żerczyce, comme d'ailleurs aussi celui des autres villages dans les deux "starosties" témoigne une grande différenciation entre les exploitations du point de vue de leur grandeur avant la réforme. On peut constater aussi qu'il y avait déjà alors un grand émiettement des exploitations paysannes primaires comme suite à l'accroissement naturel de la population.

En principe, les groupes de gens apparentés occupaient les exploitations agricoles dans le cadre de la même *szuźba*. Les familles non apparentées s'établissaient plus rarement sur un service entier. Souvent les membres d'une famille paysanne très ramifiée disposaient des *szuźby* voisins.

En moyenne, trois mains-d'oeuvre masculines échouaient à une exploitation agricole. Les femmes n'étaient pas enregistrées à l'exception exclusive des veuves des tenanciers d'exploitations. Dans les "starosties" analysées, les feux "composés", groupant 2 ou 3 petites familles apparentées entre elles, constituaient un grand pourcentage. Les *szuźby*, par contre, dont les grandes familles paysannes disposaient, présentaient une communauté territoriale et économique obligée aux redevances communes en faveur de la cour seigneuriale.

Chaque exploitation agricole disposait en moyenne de deux animaux de trait c.-à-d. d'une "charrue à croc" de boeufs (2 boeufs) ou d'un et demi "attelage" (1 boeuf + 1 cheval ou jument) vu que la force motrice d'un cheval était égale à celle de deux boeufs. Comme il en résulte des inventaires, on attelait aussi les vaches à la charrue à croc. Il arrivait quand même assez souvent que les exploitations moins grandes à 3, 2 ou même à un baril comme p. ex. à Żerczyce — avaient un nombre surprenant d'attelages en animaux de trait, montant à 3, 6 et même à plus de paires de boeufs. Mais il y avait d'autre part des exploitations ne disposant d'aucun attelage. A Żerczyce en 28 sur 200 exploitations il n'y avait point d'animaux de trait. Dans le cas du manque d'attelage ou dans son insuffisance, l'entre-aide des voisins devait sans doute intervenir.

Les *szuźby* étaient chargés de redevances en faveur de la cour seigneuriale d'une façon uniforme, indépendante du nombre des feux et des exploitations. Les redevances en blé appelées *dziakło* ainsi qu'en miel et en fourrures<sup>17</sup> étaient acquittées en argent. Mais la "station" (lat. *statio regalis*), redevance en cas de visite du roi dans le siège de la "starostie", était réglée en nature. Chaque *szuźba* devait fournir alors 2 charriots de foin, 1 quartaut d'avoine pour chaque boeuf et 1 coq pour chaque feu. Le reste des produits imposés par l'administration devait être fourni en commun par le village entier. La "station" était obligatoire aussi dans le cas où les envoyés royaux venaient dans la "starostie". La grande quantité de viande et de boeufs, chèvres, moutons et porcs fournis pour les buts de la "station" témoigne le niveau bien développé de l'élevage de bétail dans les deux "starosties".

<sup>17</sup> C'était une forme archaïque de redevances en fourrures c.-à-d. en peaux de petits animaux de fourrure tels les castors, martres ou fouines, écureuils et d'autres plus estimés encore qui servaient régulièrement de monnaie jusqu'au XIII<sup>e</sup> siècle. A l'occasion de cette redevance le scribe a intercalé la remarque qu'à Żerczyce "*tak z staro-dawna daja*" (on donne ainsi depuis les temps les plus anciens).



Les habitants de Żerczyce étaient obligés en outre de travailler sur les champs de la réserve seigneuriale pendant cinq jours de la semaine, à l'exception des dimanches et lundis. De cette corvée n'étaient exempts que les habitants de villes et les villages habités par la petite noblesse russe appelée *bojards poutnyi* (les bojards-courriers) qui transportaient le courrier d'État et assuraient le service à cheval.

Les inventaires d'avant l'arpentage en manses ne renferment aucune information sur les limites de villages. Dans ce temps-là, elles n'étaient pas encore bien établies. C'est en réalisant l'un des points du décret du 1557 qu'on les a fixées.

Żerczyce qui comptaient 201 maisons constituaient le plus grand village dans les deux "starosties". En même temps, la ville de Mielnik ne possédait pas beaucoup plus de maisons que celui-là car elle ne comptait que 210 maisons. Mais pour la plupart, il n'y avait que des petits villages de plusieurs maisons dont le nombre ne dépassait pas la cinquantaine. Les maisons étaient dispersées sur tout le territoire du village, une à une ou par groupes formant de petits hameaux. On peut supposer qu'à Żerczyce — dans le cas des *szluby* divisées en plusieurs exploitations indépendantes avec leurs propres feux — l'emplacement des maisons était assez incohérent, tandis qu'il était beaucoup plus serré si les membres d'une famille, logés séparément, cultivaient en commun la même exploitation.

Les champs cultivés appartenant à la même exploitation, composés des terres arables et de celles de fension (c.-à-d. les prés), ne constituaient pas de blocs serrés, mais leurs parcelles formaient une sorte d'échiquier entremêlé des pâturages et des broussailles où l'on laissait le bétail brouter. Les parcelles d'une exploitation entraient souvent dans les terres d'un voisin.

Malgré que les inventaires ne définissent pas exactement l'emplacement des terres, les relevés des exploitations et les remarques introduites parfois dans le texte nous autorisent quand même à formuler la suggestion sus-mentionnée. Cette opinion est confirmée par le décret de l'année 1557 qui stipule la liquidation de l'échiquier incohérent à l'intérieur des villages arpentés en manses et le remembrement de toutes les terres en trois champs séparés, égaux dans la mesure du possible du point de vue de leur surface. Le décret a stipulé aussi la liquidation de l'échiquier extérieur qui entrait sur le terrain d'autres villages.

Le système de l'assolement triennal n'a présenté aucune nouveauté introduite grâce à la réforme de manse. H. Łowmiański<sup>18</sup> a démontré déjà que ce système de culture de terre existait déjà pendant la période tribale à côté du système brasse-jachère et du système biennal. La différence consiste à ce que la réforme a introduit le système d'assolement triennal régulier c.-à-d. que toutes les terres du village prises ensemble ont été partagées en trois champs égaux dont l'un était chaque année en jachère et sur les deux autres on semait le blé d'hiver ou le blé de mars, tandis qu'avant la réforme chaque exploitation appliquait l'assolement triennal sur ses propres parcelles, indépendamment de celles des voisins. Łowmiański définit ce système d'avant la réforme comme l'assolement archaïque ou désordonné. L'auteur argumente à juste raison que le décret de l'année 1557 ordonnant l'arpentage en manses ne contenait aucune disposition qui obligerait les exploitateurs à introduire l'assolement triennal à la place d'autres systèmes de culture plus anciens. Evidemment, il s'est généralisé déjà

<sup>18</sup> H. Łowmiański, *Studia nad początkami społeczeństwa i państwa litewskiego* (Études sur les origines de la population et de l'État lithuaniens), Vol. I, Wilno 1931, p. 20–217.



avant la réforme et il n'y avait aucun besoin d'en parler encore dans le texte du décret.

L'image présentée de l'habitat et de l'économie rurale en Podlachie pendant la période précédant la moitié du XVI<sup>e</sup> siècle nous prouve, clairement qu'il y avait un besoin urgent d'une réorganisation radicale. Elle a eu lieu pendant les années 60 de ce siècle grâce à la réforme de manse. Elle a réglé définitivement les rapports économiques et sociaux dans les villages de Podlachie ainsi que le système territorial de l'habitat rural dans cette région.

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## REGULAR GREEN VILLAGES IN POMERANIA

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In 1973 at the Perugia Symposium<sup>1</sup> I spoke about the origin and the development of small green villages in Pomerania. Now I should like to draw attention to the regular green villages in Pomerania. This area is of special interest for comparative research work on European rural settlement because it is part of a larger region where green villages appear. This region of green villages stretches to the west as far as Elbe. In Denmark on Zealand and Falster as well as in Schleswig and Holstein the area of green villages borders upon the green villages of 'Forta' type. According to G. Schwarz<sup>2</sup> and to F. Hastrup<sup>3</sup> 'Forta' villages underwent a transformation from small, irregular green villages into regular villages with a rectangular site in the centre and with open fields at the time of planned regulation of 'Solskifte' type in the 13th century.

Irregular green villages constitute the nucleus of the oldest Slavonic network of settlements in Pomerania. Like in the neighbouring regions also in Pomerania the regular green villages with a regular village plan and open fields are the continuation of the small irregular green villages. Regular villages were created by planned land regulation and colonization. In Pomerania mainly the ducal and monastic property was interested in this action, less frequently the private one. So the big land property had influenced the spatial structure of the newly established villages. The villages in Pomerania were either established according to older local models or they were reconstructed in the period of great agrarian reforms, especially in the 13th and 14th centuries.

The research problem consists in distinguishing the regular villages from the irregular ones, as well as in finding out from what period are the sites and field patterns; that is, distinguishing the regular measured village from the irregular, unmeasured village in which the *mansus* (*Hufe*) was only a unit for taxation and not a unit of measure.

In my research work on regular villages I applied the retrogressive methods; especially the historical metrological method. The basic historical sources were archival materials, mainly from the 16th and 17th centuries and above all the

<sup>1</sup> H. Szulc, On the origin and development of small green villages in the region of West Pomerania, I Paesaggi Rurali Europei, atti del convegno internazionale indetto a Perugia dal 7 al 12 maggio 1973. Dalla Conference Europeenne permanente pour l'etude du paysage rural, Deputazione di storia patria per L'Umbria, Appendici al Bollettino N. 12, Perugia 1975, pp. 493-506.

<sup>2</sup> K. H. Schröder and G. Schwarz, Die ländlichen Siedlungsformen in Mitteleuropa, Grundzüge und Probleme ihrer Entwicklung, Forschungen zur Deutschen Landeskunde, 175, 1969.

<sup>3</sup> F. Hastrup, Danske Landsbytyper, Skrifter fra Geografisk Institut ved Århus Universitet, 14, Århus 1964.

manuscript plans in big scales from the end of 18th and the beginning of 19th century. I found about 200 of such plans for Pomerania. On the basis of the analysis of many villages, mainly the villages of the ducal or of monastic properties, some hypotheses can be set forth concerning the origin and the evolution of these settlements. It was also possible to establish certain regularities of their layouts.

Two kinds of villages can be distinguished. First, there are green villages with a circular arrangement of houses and a radial pattern of tofts. Regular

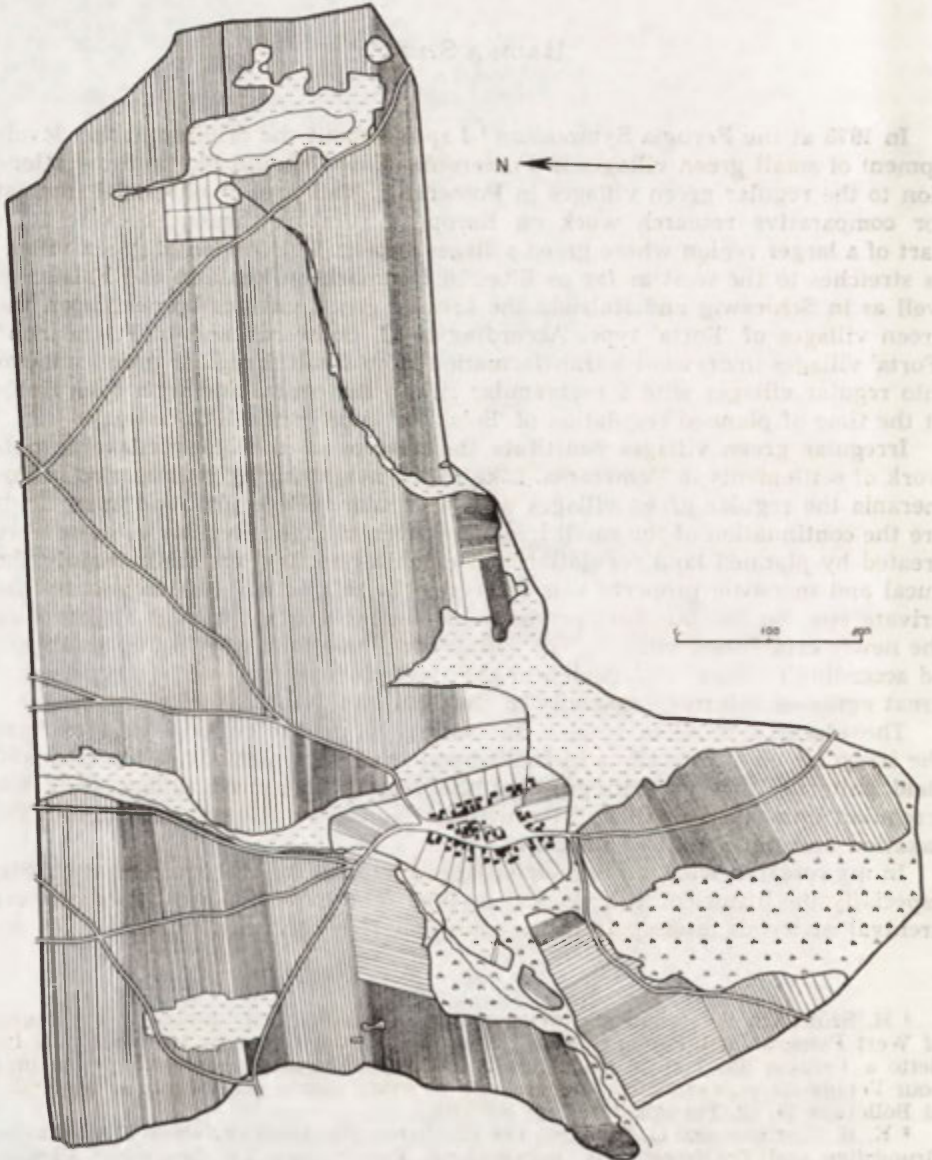


Fig. 1. The village Stare Chrapowo (see footnote 4; at present in the Szczecin voivodship), a copied plan of the village from 1750



villages of the second type have the village green in the form of a widened street while the village plan is a rectangle having a characteristic length to width proportion. The fields are open.

The village Stare Chrapowo<sup>4</sup> is an example of the first type of regular green villages (Fig. 1). On Engel's map of village layouts<sup>5</sup> this village was defined as a blind alley settlement (*cul de sac, grosses Sackangerdorf*).

At the end of 14th century this village belonged to St. Mary's monastery.<sup>6</sup> After the source materials of 1628<sup>7</sup> taxes were paid on 40 and half *mansi* (*Hackenhufen*). At the end of the 18th century there were 16 peasants and 6 free-holders.<sup>8</sup> The plan<sup>9</sup> of the middle of the 18th century shows the village plan characterized by the regular disposition of tofts, each having a defined width modulus. The houses of the cottagers were situated on the green in the middle of the village plan. There was also the church.

The village plan was enclosed. It had also a defined topographic situation near marshy meadows and pastures. The pasture is signified as common pasture and it was enclosed. These pastures and meadows were some other small fields in the form of small blocks divided into property strips. On the plan you can also see two long regular fields and a third one, which is smaller and less regular. It is possible that this village passed a transformation from irregular green-village in oval form into village with regular disposition of tofts and two big regular open-fields.

The village Słowino<sup>10</sup> is an example of the second type of regular green village (Fig. 2). Słowino was mentioned for the first time in 1262;<sup>11</sup> the bishop of Kamień (Cammin) gave the income tax from 40 *mansi* (*Hufen*) of Słowino to the Cisterian Order (of Bucowe). Słowino is mentioned as a village first in 1290.<sup>12</sup> According to document from 1541<sup>13</sup> the taxes were paid on 40 *mansi* (*Landhufen*). According to a document from 1569<sup>14</sup> the village belonged to the Duchy of Darłowo (Rügenwalde). There were 20 peasants and 2 free-holders.

Detailed information about the village Słowino from the end of the eighteenth century, in particular concerning the ownership and the socio-economic structure of the people, can be found in Brüggemann's<sup>15</sup> work and in the registers<sup>16</sup> from 1826 and 1833. The socio-economic structure of the people was illustrated on the plan of the beginning of the 19th c.<sup>17</sup> (Fig. 2).

<sup>4</sup> Village Stare Chrapowo (Alten Grap, Kreis Pyritz), a copied plan of the village from 1750, ca 1:5000, Archives of Szczecin.

<sup>5</sup> F. Engel, Historischer Atlas von Pommern, Karte 3, Karte der historischen Dorf-formen, Veröffentlichungen der Historischen Kommission für Pommern, Köln, Graz, 1963.

<sup>6</sup> L. W. Brüggemann, Ausführliche Beschreibung des gegenwärtigen Zustandes des Königl. Preussischen Herzogthums Vor- und Hinterpommern. Des zweiten Theils erster Band, Stettin 1784, p. 143.

<sup>7</sup> AKS (Archives of the Szczecin Princes), I/4840 of 1628.

<sup>8</sup> cf. footnote 6.

<sup>9</sup> cf. footnote 4.

<sup>10</sup> Village Słowino (Schlawin, Kreis Schlawe) a copied plan of the village from the beginning of the 19th c., ca 1:5000, Archives of Słupsk.

<sup>11</sup> Pommerisches Urkundenbuch, Hrsg. R. Klempin, R. Prümers, C. Winter, Heinemann, E. Assmann, Frederichs, Bearb. O. Heinemann, B. Poschmann, V. 1-9, Stettin 1868 (No. 190 for 1262).

<sup>12</sup> Pommerisches Urkundenbuch... *op. cit.*, No. 462, for 1290.

<sup>13</sup> AKS (Archives of the Szczecin Princes), I/1914 for 1541.

<sup>14</sup> AKS (Archives of the Szczecin Princes), I/2310, p. 305 for 1569.

<sup>15</sup> L. W. Brüggemann, *op. cit.*

<sup>16</sup> Vermessungs Register, 1826 and 1833, No. 346, Archives of Słupsk.

<sup>17</sup> cf. footnote 10.

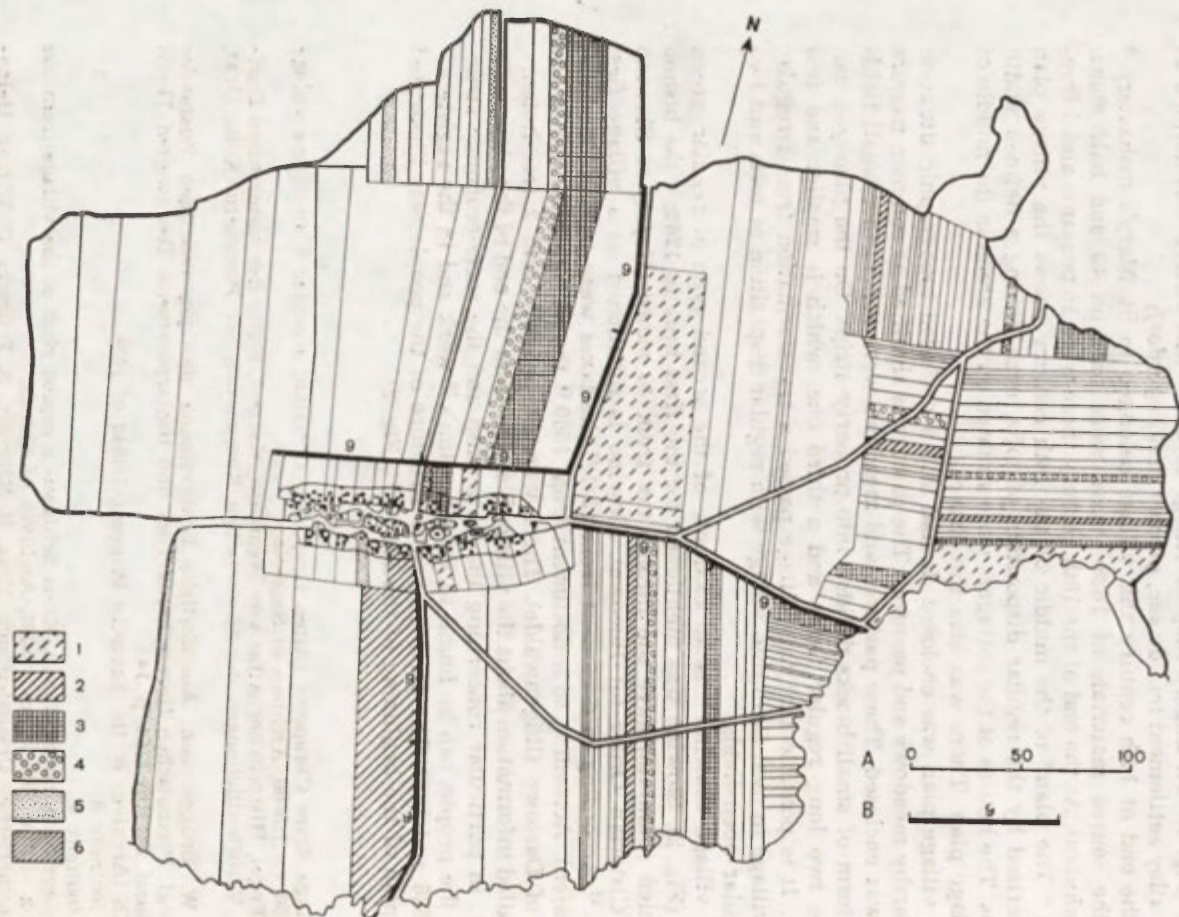


Fig. 2. The village Słowino (see footnote 10; at present in the Koszalin voivodship), a copied plan of the village from the beginning of the 19th century

1 — the church farm, 2 — the baillif farm, 3 — the peasant farm, 4 — the half-peasant farm, 5 — the freeholder farm, 6 — the cottager farm, A — rods, B — 9 cords



The distinction between a regular measured village and a regular unmeasured one is possible only by exact metrological analysis. The length of the rectangle forming the village plan is the result of applying the average Pomeranian *mansus* (*Landhufe*) which represents the surface of 19.65 ha. (In Pomerania also small *mansus* (*Hackenhufe*) was applied which was a half of the latter average *mansus*).

The village plan of the village Słowino shows a great regularity of the layout. The village plan is in the form a rectangle with characteristic proportion of width to length. The width to length proportion of the village plan is 1 : 2 and the same proportions occur in the rectangular plans of Silesian villages.<sup>18</sup> Furthermore the village Tuna near Uppsala in Sweden possesses a village plan of the proportion length to width 1 : 2. On the other hand, the most frequent proportions of the length of village plan of the villages in Silesia are 5 : 7 or their multiplications 5 : 14, or 5 : 21.<sup>19</sup>

Also the arrangement of peasants' farmsteads is regular in regular villages. The homes of free-holders and cottagers are often situated in the area of the peasant's property or in the villages with a large green; for instance, in the village Stare Chrapowo and Słowino, houses of cottagers are placed in the middle of village plan. In villages where the village-green is not large — on the outskirts of the village plan.

The strips in the middle field are created by the prolongation of toft boundaries cut for the settlements. In the width of individual tofts one can discover a repeated module based on dimensions of the rod employed at the time when these villages were established. A careful study of the width of the tofts in some cases allows the reconstruction of the primary number of peasant farms in the village and this can also be confirmed by other historical sources.

The strips of the field in the prologation of the tofts are often of the same width which proves that it is of the same origin as the central field. The central field showed the greatest regularity while the two other fields had a less regular layout referring only to the repeated width of strips or the multiples of these widths.

In addition the situation of the village plan in reference to the village borders was not accidental. I have found such regular position of the village plan in Pomerania (for example, in the village Słowino) and many times in Silesian villages.<sup>20</sup>

In general, however, in Pomerania, among regular villages one could find less regularity of the layout than in Silesia. The regularity in Silesian villages concerns the place of the village plan in relation to the village borders, to the length and shape of the village borders. This may prove that villages in Pomerania were established during a longer period as a result of previous clearance and that they were only gradually converted into regular villages with a three field system.

The villages of Pomerania have gone through various stages of development and regression. The 30 Years War caused the greatest devastations, and

<sup>18</sup> H. Szulc, *Osiedla podwrocławskie na początku XIX w.* (Sum.: Suburban settlements in the vicinity of Wrocław at the beginning of the 19th century), Wrocław-Warszawa-Kraków 1963; H. Szulc, *Typy wsi Śląska Opolskiego na początku XIX w. i ich geneza* (Sum.: Types of rural settlements of Opole Silesia at the beginning of the 19th century and their origin), Prace Geogr. IG PAN, 66, Warszawa 1968; H. Szulc, Studies on the Silesian village in the light of plans from the beginning of the 19th century, *Kwart. Hist. Kult. Mater.*, 16 (1968), 4, pp. 621-639.

<sup>19</sup> cf. footnote 18.

<sup>20</sup> cf. footnote 18.



whole villages or parts of villages were deserted. After the War not all of the farms were restored or rebuilt within the same property boundaries, while other villages were situated on bad soils, unfavourable for the development of the three-field system and thus escaped regulation.

In connection with the studies on villages in Pomerania, similar new problems arise. For instance: why are green villages the dominant settlement form in this area? What factor, cattle rearing or defence, has determined the shape of the village plans? Which of the factors, the big landed property, the system of economy or ethnic relations, have played the principal role in forming specific settlement structures in Pomerania? In this context comparative studies on historical metrology of the plans of regular green villages west of the Odra, as well as in Denmark, in southern Sweden and in England would be of great interest.

On the basis of studies on Pomeranian villages the following general conclusions can be drawn:

(1) Pomerania is part of a larger settlement region where green villages are the dominant settlement form.

(2) Two kinds of green villages appear in this area: small irregular villages with a block and strip field pattern and large regular villages with either open fields or fields in strips.

(3) The small irregular, green villages in this area represent the oldest villages of Slavonic origin. Regular green villages with an oval or circular village plan represent their succession.

(4) Applying the method of historical metrology, thanks to the preserved village plans from the end of the 18th or the beginning of the 19th century, some principles in the layout of regular green villages can be determined. Regular measured green villages can be distinguished from regular unmeasured ones, where the *mansus* was used only as a fiscal and not a measure unit. Villages with open fields can also be distinguished from villages having fields in strips.

(5) Like in Silesia, also in this case, the opinion is confirmed, that on good soils social and economic processes develop more rapidly. In these areas the three field system was introduced rather early. It caused great spatial transformations of the existing villages, mainly thanks to big landowners, either ducal or monastic. In this area they have contributed to the formation of big settlement regions with regular green villages.

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## THE RURAL LANDSCAPE OF NORTH WALES IN THE LATER MIDDLE AGES

COLIN THOMAS

The period between *circa* 1350 and 1600 A.D. is acknowledged as one of widespread social and economic upheaval throughout Europe. Nowhere are the varied processes of historical and geographical change more vividly illustrated than on the western fringes of Britain, notably in the area of the three counties of Anglesey, Caernarvon and Merioneth, together with adjoining districts in North Wales.

*Documentary Sources.* The administrative counties had been created by the Statute of Rhuddlan (1284), following the conquest of the independent Welsh principality of Gwynedd by the armies of Edward I in a series of campaigns after 1276.<sup>1</sup> Military activity in difficult terrain against an alien population not only required a political settlement, but also surveys of territories acquired by the King to establish what type of social structure existed in the ancient districts (commotes), townships and hamlets and what economic obligations were due to the defeated prince and hence to the Crown.

Some extents or lists of taxpayers were conducted by 1295, though revisions had to be made after various rebellions and the outbreaks of pestilence in the mid-fourteenth century. The most comprehensive surveys were those of Anglesey and Caernarvon (1352) and Merioneth (1415-20)<sup>2</sup> but earlier comparable accounts for the eastern border districts of Denbigh date from 1315.<sup>3</sup> From these sources the view of medieval Welsh society differs in detail from that contained in the Law Codes of tenth century origin which had already been substantially modified in practice by the thirteenth century, yet the essential importance of kinship obligations and the demarcation between free and bond units of organization remain.

A second source is provided by the surveys of Crown Lands<sup>4</sup> compiled in the late sixteenth century which give far greater detail of individual farm names, together with rents paid and names of tenants or occupiers. Of similar date are collections of estate deeds,<sup>5</sup> relating to properties being sold, exchanged

<sup>1</sup> J. E. Morris, *The Welsh wars of Edward I*, Oxford 1901.

<sup>2</sup> These are printed in: H. Ellis (ed.), *The record of Caernarvon*, London 1838.

<sup>3</sup> P. Vinogradoff and F. W. Morgan (eds.), *The survey of the honour of Denbigh*, Oxford 1914.

<sup>4</sup> These are now held at the Public Record Office, London, although County Record Offices often have microfilm or photostat copies of documents for their localities.

<sup>5</sup> Extensive archives for the area under discussion are catalogued in the Library of the University College of North Wales, Bangor (notably the Mostyn Collection), while others may be consulted at the National Library of Wales, Aberystwyth, and in County Record Offices.



or mortgaged, which give an insight into the structure of land ownership and the scale of land transfers especially from about 1440 onwards. During the same broad period, certainly after 1536/1542 when the Acts of Union of Wales with England allowed legal standardization to be achieved, the state bureaucracy had an increased influence. In particular the proceedings of the Crown courts<sup>6</sup> demonstrate how agrarian changes were not always considered beneficial to all members of the community, but often resulted in physical conflict or litigation concerning disputed boundaries or possession.

A third group of sources are of even later date in the form of cartographic surveys of estates in the eighteenth century and the more comprehensive cover of the Tithe Maps and Apportionments of the 1830's and 1840's. Their great merit is that they give the first clear visual impression of the landscape before the publication of the large scale Ordnance Survey maps, although post-medieval modification of field boundaries, partly resulting from the distinctive process of Parliamentary enclosure (itself well-documented in many cases), does mask or obliterate the full variety of ancient patterns.<sup>7</sup> Unfortunately this is particularly true in the most fertile and continuously settled districts where successive overlays have probably also wiped out traces of prehistoric occupation. Nevertheless these maps and accompanying schedules possess considerable retrospective content in the shape of relict landscape elements and also Welsh field and farm names that can be shown to have long-term continuity and ecological significance.<sup>8</sup>

Contemporary descriptions of the landscape and socio-economic milieu are few and not of great value to the historical geographer: certainly North Wales has nothing to compare with the works of George Owen and Rice Merrick for Pembrokeshire and Glamorgan in the sixteenth century, though the general observations of John Leland are of broad interest.<sup>9</sup>

#### BASIC SETTLEMENT CHARACTERISTICS

The landscape of North Wales *circa* 1350 A.D. was still dominated, especially in the mountainous core of Snowdonia, by forest and heathland, although the influence of human occupation in changing the vegetation since the Neolithic period can be discerned by pollen analysis. The majority of the population, having access only to a wooden technology in which iron implements or parts were highly valued, had gravitated towards areas of inherently fertile soils that could be cleared of timber and scrub and cultivated with comparative ease. For the most part these were the base-rich brown earth type, but in many districts they had been subject to gleying and podzolisation because of local conditions of topography in relation to precipitation and drainage. In essence the areas of most concentrated settlement were the lower slopes below about

<sup>6</sup> See for example, I. ab O. Edwards (ed.), *Catalogue of Star Chamber Proceedings Relating to Wales*, Cardiff 1929; E. A. Lewis (ed.), *Inventory of Early Chancery Proceedings concerning Wales*, Cardiff 1937; E. G. Jones (ed.), *Exchequer Proceedings concerning Wales, Henry VIII-Elizabeth*, Cardiff 1939; E. A. Lewis and J. C. Davies (eds), *Records of the Court of Augmentations relating to Wales and Monmouthshire*, Cardiff 1954.

<sup>7</sup> C. Thomas, Colonization, enclosure and the rural landscape, *National Library of Wales Journal*, XIX, 1975, pp. 132-146. This article deals predominately with the nineteenth century, but also has extensive references to sources and studies in Wales.

<sup>8</sup> *Idem*, Place-name analysis in the geographical study of the rural landscape of Wales, *Studia Celtica*, VIII/IX, 1973-74, pp. 299-318.

<sup>9</sup> For references to these travellers and residents in Wales, together with extracts from their works, see F. V. Emery, *The world's landscapes: Wales*, London 1969.



800 feet O.D., (250 m) that is the narrow peripheral coastal plain on the mainland, together with the platform of Anglesey and the margins of the major river valleys that penetrated the upland massif.<sup>10</sup>

In such environments there developed a thick network of nucleated settlements, often held by unfree tenures (*tir cyfrif*), in which the holdings of the bond population were jointly tilled and the plots periodically redistributed so that all had equal shares and equal obligations within the community framework. Elsewhere continued occupation of a rural township or hamlet (*tref*) by a patrilineal kindred group had led to the emergence of more liberal hereditary tenure (*tir gwelyawg*)<sup>11</sup> in which, on the death of the proprietors, land was divided between all male heirs, resulting in due course in a more openly clustered settlement form spread around one or more arable sharelands (*rhandir*). In practice it would appear that the economies of bond and free communities in the lowlands did not differ greatly from each other: the prime distinction lay in the realm of social organization. Nevertheless, one type of hamlet, the *maerdref*, or reeve's settlement, does possess a superior element of status and physical nucleation than other *tir cyfrif* bond vills, or bond or free *tir gwelyawg* townships. The significance of the *maerdrefi*, situated one in each commote, was partly administrative for it was from these bases that the prince's officials supervised in a general way the other hamlets in the district and with a more direct control the functioning of the demesne lands in their immediate vicinity. Visually the bond vill would have presented a compact form, consisting not only of timber houses, but also the *llys* or court of the prince with its great hall, barns and granaries, stables and kilns, and the mill to which several other hamlets owed suit. Around the village were extensive openfields, the position of which can sometimes be distinguished in the documents and later maps by the name *maes*, together with its component strips having Welsh names like *erw* (literally, acre), *cyfar*, *llain*, *dryll* or *talâr*, all separated by unploughed furrows or turf balks (*sinach*). Beyond the economic or technical limits of cultivation could be seen the hay meadows merging into the forest or common pasture (*cytir*), or the estuarine and tidal marshes (Fig. 1).

More remote, though not necessarily smaller, hamlets developed at higher altitudes, where cultivable land was less abundant and where steeper slopes

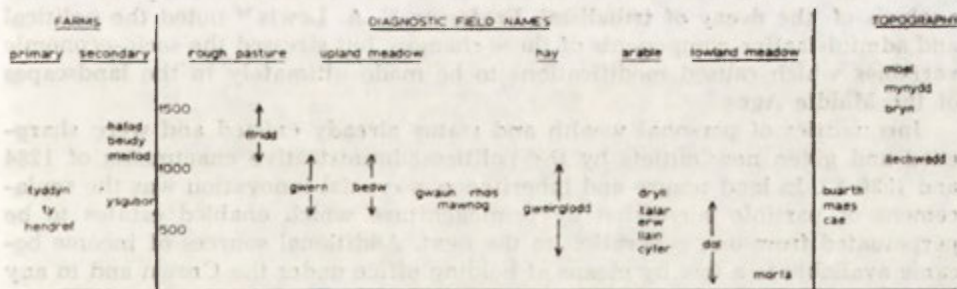


Fig. 1. Altitudinal range of selected Welsh place names

<sup>10</sup> G. R. J. Jones, Rural settlement in Anglesey, in: S. R. Eyre and G. R. J. Jones (eds), *Geography as human ecology*, London 1966, pp. 199-230; *idem*, The distribution of Medieval settlement in Anglesey, *Transactions of the Anglesey Antiquarian Society*, 1955, pp. 27-96.

<sup>11</sup> These tenures are dealt with in G. R. J. Jones, Field systems in North Wales, in: A. H. R. Baker and R. Butlin (eds.) *Studies of field systems in the British Isles*, Cambridge 1973, pp. 430-479.

and harsher microclimates exercised greater restrictive controls over farming. On the other hand, the resources of woodland and pasture here were correspondingly greater, and hamlets tended to possess a somewhat larger free social element, while in Merioneth there appeared alongside the *gwely* a unit of agrarian organization called the *gafael*, literally a holding, which may indicate that more individualistic forms of settlement were emerging, perhaps in response to incentives to colonize poorer land.<sup>12</sup>

There has been a tendency in the past to regard medieval upland hamlets as having a stronger pastoral economic foundation than their lowland counterparts. The meagre data on livestock numbers that have survived from the 13th and 14th centuries suggest that whereas lay and monastic properties capitalized on the uplands for cattle, sheep and horse pastures, certainly during the non-winter months, officially between 1 May and 1 November, cattle were almost universally kept in the lowlands where they fed on meadow woodland clearings, as well as grazing the stubble after the harvests had been reaped. Similarly freely drained limestone or sandy soils supported large flocks of sheep in parts of the Lleyn peninsula, while pigs obtained pannage in the forests.<sup>13</sup> Food renders given by all communities include elements of grain — wheat, barley or oats — together with livestock produce such as butter, and cash contributions and in specific examples the integration of lowland and upland territories is well documented. For instance, at the royal *maerdref* of Aber in Caernarvonshire, the demesne comprised 500 ha on the fertile plain sloping to the sea, but the manor also incorporated *superior terra* or upper land on the mountainside which represents the seasonal use of *hafodau* or summer pastures. Likewise the *maerdref* of Ystumgwern to the south of Harlech consisted of a carucate of arable land together with meadow and pasture situated in Cwm Nantcol, several miles in the interior and several hundred metres higher.

## PROCESSES OF CHANGE

By the 14th century the kinship-based structures depicted in the medieval Welsh laws had already undergone considerable erosion in certain respects, partly in consequence of the need to break their initial rigidity and partly as a result of the new forces unleashed by the Edwardian conquest. In his analysis of 'the decay of tribalism', Professor E. A. Lewis<sup>14</sup> noted the political and administrative components of these changes, but stressed the socio-economic variables which caused modifications to be made ultimately in the landscapes of the Middle Ages.

Inequalities of personal wealth and status already existed and were sharpened and given new outlets by the politico-administrative enactments of 1284 and 1536-42. In land tenure and inheritance, a crucial innovation was the replacement of partible succession by primogeniture which enabled estates to be perpetuated from one generation to the next. Additional sources of income became available to a few by means of holding office under the Crown and in any case the spread of a cash economy and a greater spirit of commercialism was stimulated by the creation of fortified boroughs at Conway, Caernarvon, Bea-

<sup>12</sup> T. Jones Pierce, Pastoral and agricultural settlements in early Wales, *Geografiska Annaler*, 43, 1961, pp. 182-189; C. Thomas, Social organization and rural settlement in medieval North Wales, *Journal Merioneth Historical Society*, VI, 1970, pp. 121-131.

<sup>13</sup> C. Thomas, Thirteenth century farm economies in Gwynedd, *Agricultural History Review*, VIII, 1968, pp. 1-13.

<sup>14</sup> E. A. Lewis, The decay of tribalism in North Wales, *Transactions, Honourable Society of Cymmrodorion*, 1902-3, pp. 1-75



umaris, Cricieth and Harlech, the markets and fairs of which directed all trade in Gwynedd, while other traffic was conducted through lesser towns such as Bala or the English border markets such as Whitchurch. Commutation of rents and services to monetary equivalents necessitated participation in wider economic spheres, a feature made easier by the gradual establishment of stable political conditions and government by the Tudor period.<sup>15</sup>

Transactions in land itself increased as English burgesses invested their profits in rural property, a procedure that was facilitated from the late 13th century by the application of feudal principles of land law to the inheritances of Welshmen convicted of felony during the wars and rebellions. Formerly under Welsh law, the share of a person dying without heirs was absorbed again into a redistribution among members of a clan who were forbidden to sell or otherwise alienate land to non-members. In future such lands escheated to the Crown, as did the property of those guilty of treason or murder, or those who failed to meet fiscal obligations. This augmentation of the land market was boosted by the demographic effects of war and pestilence. The wars of independence, (1277–84) local rebellions, the Glyn Dwr revolt (1400–15) and campaigns during the Wars of the Roses resulted in periodic widespread losses not only of adult male participants, but also of dependants subjected to a rapidly falling standard of living. To destruction and poverty was added disease in the outbreaks of plague in the mid-14th century, so that large numbers of the population were removed by death or flight from the increasing burdens of taxation. This was especially true of bond communities, among whom obligations were allocated equally, reduction of numbers placing a greater pressure on those who remained.

Bond settlements in particular, therefore, became the object of much extraneous investment, as townsfolk sought to build up consolidated estates. Among the best known is that of the Bolde family from Lancashire who settled in the borough of Conway. Between 1420 and 1453 Bartholomew Bolde acquired no less than 60 cottages, 1500 ha of arable land, 500 ha of meadow and 2500 ha of pasture, scattered through the ancient hamlets of the lower Conway valley.<sup>16</sup> Here the purchase, mortgage and exchange of dozens of intermixed quilllets, each with appurtenant rights of common grazing, are documented in estate deeds and it is evident that possession was but the first step in amalgamation of field strips and their re-shaping into the larger compact farms that characterize the area in the modern period and often retain medieval township names.

Native families too began to enlarge their properties, predominantly through a loophole in Welsh law which permitted them to lease land for periods of 4 years, which was often renewed repeatedly to become a perpetual mortgage. Thus by the mid-15th century Griffith ap Aron and his son Rhys of Peniarth, (Merioneth) had acquired dozens of these *tir prid* plots which eventually became consolidated as the Peniarth estate spread over several parishes.<sup>17</sup> Individual fields or homesteads of this type rarely exceeded 4 or 5 acres (10–12 ha) and most were much smaller as a consequence of medieval morcellation, but from the 1530's onwards the land market was augmented by the confiscated estates of monastic houses dissolved by Henry VIII and rented to local proprietors.

Whereas the social and demographic crisis of the 15th century resulted in widespread abandonment of homesteads and fields population recovery before

<sup>15</sup> T. Jones Pierce, Some tendencies in the agrarian history of Caernarvonshire during the later middle ages, *Transactions, Caernarvonshire Historical Society*, 1, 1939, pp. 18–36.

<sup>16</sup> *Idem*, The gafael in Bangor manuscript 1939, *Transactions, Honourable Society of Cymmrodorion*, 1942, pp. 158–188.

<sup>17</sup> National Library of Wales, Peniarth Ms. 496.



the end of the 16th century provided the incentive for renewed agrarian colonization. The Extent of Merioneth (1415) lists 30 bond and free holdings, some of which were once large enough to support a whole clan, that were than vacant and *sine hereditis cognites* in the rugged northern commotes of Penllyn and Arduwly, yet in the same townships there existed holdings that had been created only a generation earlier and were occupied by the sons or grandsons of their founders. Rather later increased livestock trade with England and local demand for food encouraged tenants and landlords to encroach upon Crown wastes in the Forest of Snowdon and in 1575 Elizabeth I issued a commission to the Earl of Leicester to discover these illegal assarts which were being claimed as parts of freehold farms. In Merioneth alone, despite attempted concealment over 25,000 ha of these lands were listed, predominantly held by the emergent squirearchy. Over 51% of the plots comprised less than 25 ha but 40% of the total area enclosed from the commons in this way lay in individual blocks of over 250 ha. More than 90% were described as *ffridd*, i.e. rough grazing on intermediate slopes below the more exposed mountain shoulders, but some were patches of meadow on valley bottoms or near the coast at Morfa Meirion.<sup>18</sup> Both ecological zones would have been less favourable towards cultivation than long-established tillage areas, the upper because of long severe winters, and the lower because of impeded soil drainage, yet in parts of Anglesey and the wider vales, medieval colonization had extended onto gley soils, for example the drainage of Dinorben marsh before 1334.

Such expansion clearly denoted active transformation of the landscape. Many placenames of newly enclosed commons in the late 16th century incorporate woodland elements such as *gwern* (*Alnus*: alder) and *bedw* (*Betula*: birch), suggesting that once cleared these localities would have provided good hay meadows, while simple drainage would have rendered them cultivably productive. Elsewhere concerted attacks were made on the heavier forest cover, as in the hills north of Dolgellau where Hugh Nanney, a local squire was fined £1,500 and imprisoned for felling 10,000 oak trees on Crown Land. Similar woodland clearances are documented in the Conway valley, where it has been suggested mowing would have converted *Phragmites communis* (reeds) vegetation into *Festuca* (fescue) associations in time.<sup>19</sup>

At higher altitudes new independent homesteads or *tyddynod* were carved out of former monastic granges, for example in the upper Mawddach valley, and summer dairies (*hafod-au*) transformed into permanently-occupied farms, surrounded by clusters of tiny walled fields. Enclosure and the appearance of new field shapes and field boundaries is a characteristic feature of the later medieval tendency away from kindred-based settlement to more individualistic agrarian units, as rents became associated not with whole clans or townships, but with specific individuals and fixed areas of land. Lewis summarised the trend thus: "Consanguinity, the basis of tribal society, gave way to territorialism, the basis of feudal society... progress henceforth, dependend more on geography than genealogy."<sup>20</sup>

Visibly the open horizons and, in theory, regular strip fields were replaced in the lowlands by landscapes more broken by quickset hedges and turf banks, while in the uplands irregular paddocks were defined by walls of boulders or grit slabs. Nevertheless, tenurial and physical changes in the countryside were

<sup>18</sup> C. Thomas, Enclosure and the rural landscape of Merioneth in the sixteenth century, *Transactions, Institute of British Geographers*, 42, 1967, pp. 153-162.

<sup>19</sup> R. E. Hughes, Environment and human settlement in the commote of Arllechwedd Isaf, *Transactions, Caernarvonshire Historical Society*, 2, 1940, pp. 1-25.

<sup>20</sup> E. A. Lewis, *op. cit.*, p. 34.

not accepted with universal approval and court cases frequently involved disputes over boundaries that often resulted in destruction of new hedges and fences by peasants anxious to protect their ancient rights of common. Moreover, the process of landscape transformation was far from complete for alongside evidence of enclosure and tenurial simplification are documentary testimonies that open field complexes survived in a modified form and contracted scale even into the middle of the 19th century, when different pressures obliterated virtually all surface relics of the medieval patterns.

The New University of Ulster, Coleraine

not accepted with universal approval and some other linguistic movements  
 have over boundaries that often resulted in the formation of new dialects and  
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The New University of Warsaw (1827)



A NUCLEATED SETTLEMENT TYPE IN NORWAY IN NEED  
OF RENEWED STUDY

AADEL BRUN TSCHUDI

The common notion that the rural settlement pattern in Norway is purely one of dispersed farms, is a gross simplification, particularly when viewed in a historical perspective. Several elements in the evolution of the present settlement fabric certainly modify the picture of scattered single farms. Twin farmsteads are still rather frequent in all parts of the country but no systematic count has been made to decide the exact frequency of these and their ratio to other settlement types in differing regions. Groups or clusters of three or more farms in one common farmstead, called *tun*, used to be frequent, and are fairly common still in some parts of the country. Where consolidation of land from 1859 on resulted in the moving out of many of these farms even today a trained observer can as a rule rather easily spot the old site of the cluster. This type of nucleated settlement deserves to be re-examined by a quantitative as well as a functional approach. Their ecological setting should also be taken into account.

Farm groups of this type are more frequent than elsewhere in the western and southwestern parts of Norway and in the northern coastal districts as far as the borders of Finnmark. But they are found also in the eastern valleys and even in agriculturally richer lowlands. Both the twin farms and the multiple farms are supposed to originate from old large family farms communally owned and operated by an extended family. Time and again these farm groups have been labelled 'village-like' by scholars, due to their outward resemblance to villages. The contention of this paper is that this question has been too lightly dismissed. If so, it may be worth while to raise anew the question whether Norway has got villages in the sense commonly accepted for less marginal rural European landscapes. No geographer has made extensive studies of this particular settlement type, presumably for the reason that only recent maps are available and these do not easily lend themselves to cadastral analysis. The chief primary sources for land use or landscape studies are successive land registers from 1723 on and survey maps with accompanying descriptions, made as a part of established consolidation procedures. Despite work done on these by historians there are remaining untapped sources in the central archives for these maps.

A Swedish ethnologist, S. Erixon, who has studied the geographical extension and diffusion of culture traits on the Scandinavian peninsula recognized the Norwegian farm groups of three or more holdings as a special type of secondary village (Erixon 1960, p. 199). This was, however, refuted by most Norwegian historians, mainly on account of historic-genetic grounds. They were a fairly recent evolution and derived from unitary family farms. Whether these clustered settlements should be accepted as a true variant of villages or hamlets depends on the problem of definition. Erixon argued on the basis of functional

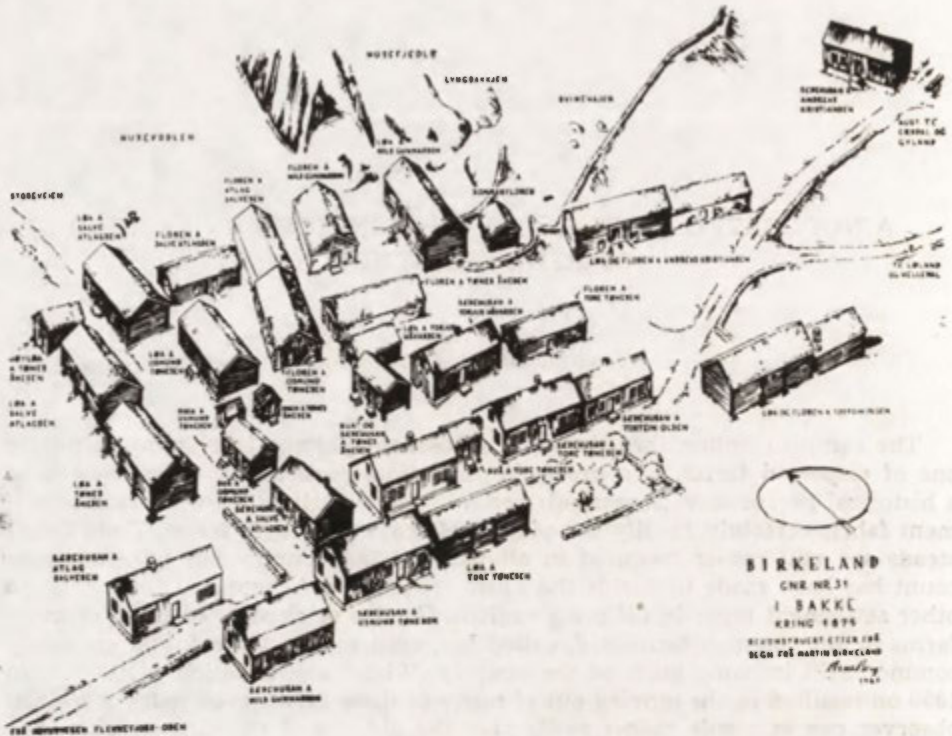


Fig. 1. A clustered settlement of the *tun* type in the county of Vest-Agder in south-western Norway, ca. 1875. The names of the farm buildings belonging to the nine holders/occupiers of this farm group indicate the intermixture of their holdings in the common farmstead. Reconstruction by A. Berg in 1961 on information obtained locally

traits and emphasized the mutual interdependence of the occupiers. Regardless of whether they were owners or tenants the prevailing system of unfenced strip fields made it necessary to co-ordinate management of the individually owned or worked holdings. In some cases the land was even operated jointly or had to be worked simultaneously by the farmers (compare: Eknes; Holmsen et al. 1952, p. 20). However, a fully developed open field system (*Zelgenwirtschaft*) never evolved and the multiple farm groups of the *tun* type were by no means formally organized communities like villages and hamlets in Sweden and Denmark. Informal organizational traits are, however, known to have existed.

When looking anew into the question of their characteristics these settlements should be viewed from formal as well as functional aspects. They should also be considered in relation to their physical and socio-economic environment. Their evolution as a relatively recent phenomenon and their origin as resulting from successive subdivisions of single farming units should not be regarded as decisive for their classification.

#### COMPOSITE FARMS IN LYNGDAL

A preliminary case study of the settlement structure in Lyngdal commune may point at some facets of the kind of approach here advocated. Lyngdal is situated in Vest-Agder county in southwest Norway just within the bounds

of the west coastal districts with a high frequency of tightly nucleated farming settlements. It is an area of transition between this particular region and the one immediately to the east which also belongs to the clustered realm of settlements but differing in respect of the lay-out of farm buildings. To the west and north the houses and barns, stables and sties, etc., are irregularly spaced, to the east they are often placed in a row or in two rows facing each other. For this reason they may be treated as different culture regions.

The oldest systematic land register in Norway is as recent as 1665-66, but this does not lend itself so well to quantitative studies as later surveys. In the eighteenth century the subdivision of farms was carried further in the two southernmost counties of Agder West and East than in any other parts of Norway, mainly due to the pressure of people on the land. This again may be ascribed to the relatively easy access to occupations as sailors or fishermen,

TABLE 1. Number of composite farms in Lyngdal commune and their continued subdivision 1723-1961

	No. of farms with 1 holding	With 2 h.	With 3-5 h.	With more than 5 h.	Total No.
1723	96	90	70	12	268
1838	80	75	95	28	278
1889	65	67	97	49	278
1905	66	54	104	54	278
1961	66	47	90	75	278

TABLE 2. Number of holdings and holders on subdivided farms in the land register in Lyngdal kommun

Reg. No. of farm	Name of farm	1961		1905		1889		1839		1723
		No. of holdings	No. of holders	No. of holdings	No. of holders	No. of holdings	No. of holders	No. of holdings	No. of holders	No. of holders
12	Ramsjord	16	11	12	11	11	11	7	7	5
17	Hundingsland	15	12	14	11	13	11	9	8	5
21	Belland	14	13	10	9	10	9	8	8	8
22	Aamland	11	9	11	9	11	9	7	7	7
26	Erikstad	13	8	11	7	10	6	5	5	4
29	Birkeland	5	1	5	2	5	2	3	2	3
* 32	Saudland	9	9	9	8	9	9	7	7	4
62	Svennevik, ytre	15	12	11	11	11	10	7	6	3
63	Svennevik, indre	21	20	6	6	6	6	3	3	2
69	Bruseland	10	9	9	7	9	7	7	6	3
97	Bjerje	7	4	7	4	7	5	6	6	3
* 107	Dragland	13	11	11	10	10	10	8	7	5
* 112	Birkeland, lille	2	2	2	2	2	2	2	2	2
* 113	Birkeland, store	7	3	6	6	6	4	3	3	2
130	Røisgård, lille	1	1	1	1	1	1	1	1	1
131	Røisgård, store	5	5	5	5	3	3	2	2	2
* 143	Skoland	13	8	10	7	6	6	4	4	4
144	Møskedal	7	6	6	6	5	5	4	4	2
* 147	Kvelland, lille	11	6	9	5	7	7	3	3	2
* 153	Kvelland	9	7	8	6	6	4	4	4	4
* 163	Bringsjord	57	44	30	24	24	21	21	13	8
164	Møskeland	23	17	7	6	7	6	8	7	6
* 250	Vegge	13	8	9	4	6	6	6	6	4



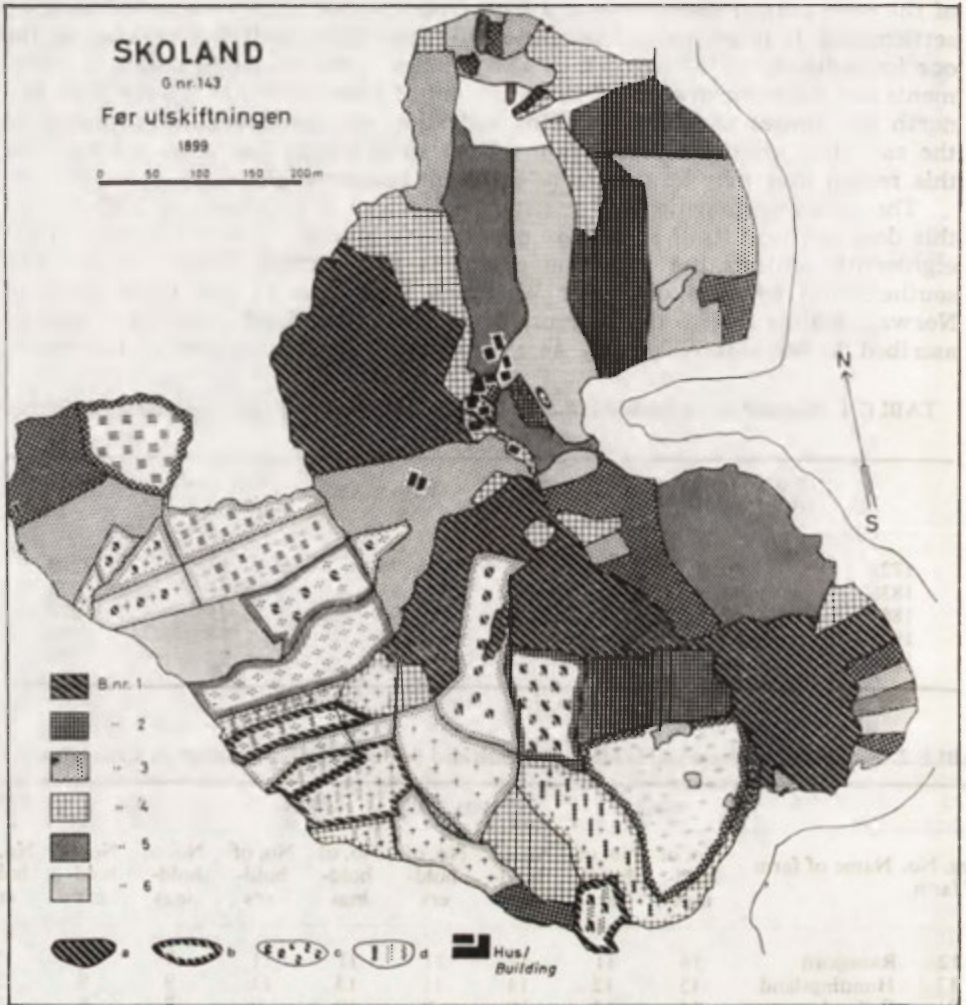


Fig. 2a. Skoland, 1899. A small cluster with the adjoining land of 6 occupiers (No. 143 in Table 2) before consolidation  
 a—the holding has full use of the land, b—only right of use of the trees, c—right of cutting the hay, d—right to use the oak trees

or subsidiary income from wooded land. About two thirds of all farms in the land register of 1723 comprised two or more farming units. Moreover, the number of holdings per farm was greater than anywhere else in the country.

Table 1 shows the situation in Lyngdal commune. It did not differ from the county average of about *two thirds*. However, the number of holdings does not give a correct picture of the real number of farming units, as some of these may comprise several holdings, that is separately registered parcels of land. The decline, 1905–61 in number of farms with 3 or more holdings is due to abandonments in the hilly country. In Table 2 a distinction is made between holdings and holders or occupiers on subdivided farms selected for analysis. (In all about 30 maps were made by surveyors in connection with consolidation settlements).

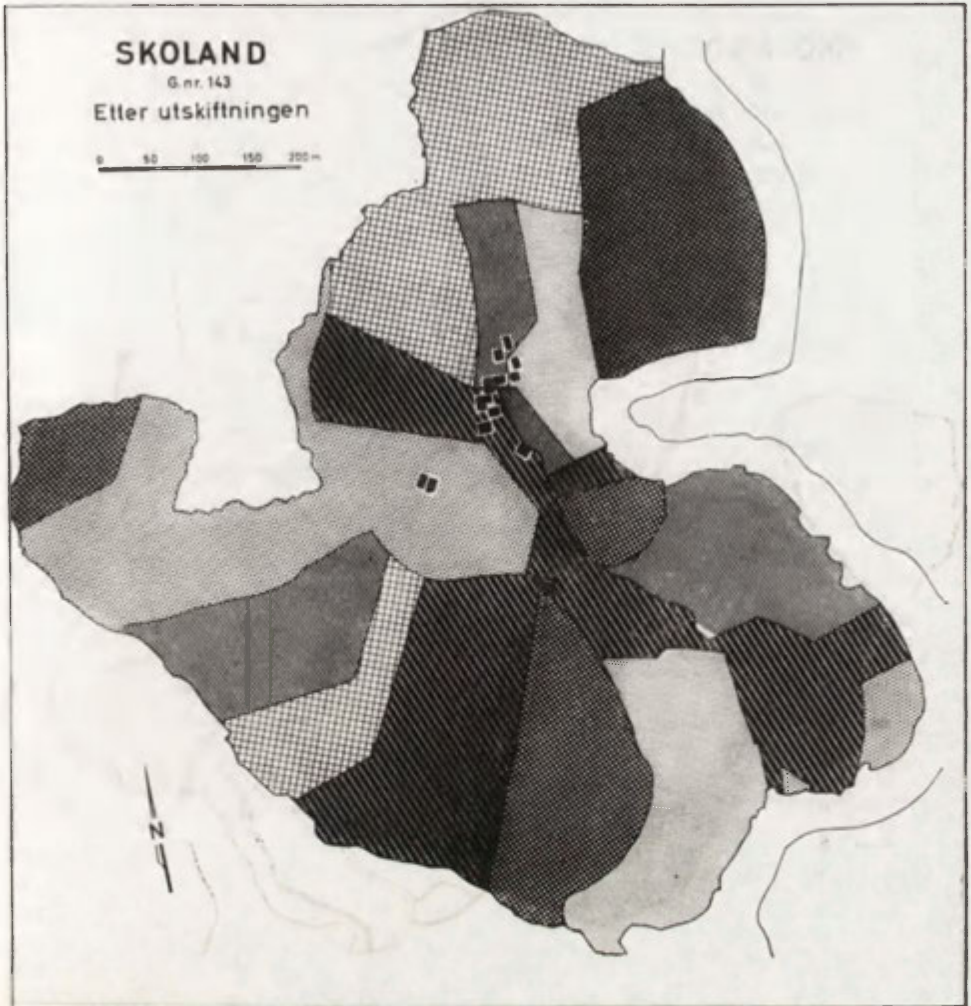


Fig. 2b. Skoland. The same farm group after consolidation

The table clearly shows that the number of holders are consistently below that of holdings. But this table also gives a somewhat distorted picture, especially for the last period. Apart from the above mentioned fact that holders may have other occupations than farming and are accordingly just living on the farm where they happened to be born others may just have bought a building site which has then been separately registered, i.e. got a separate number in the land register. The farm No. 163 in Table 2 is a case in point. (Asterisks mark the farm groups analyzed so far.) In 1961 this settlement cluster had no more than 28 farming units (of the total number of 57 holdings). Of these management units 17 belonged to the nucleated settlement, where the farms are closely spaced in a single row, whereas 11 farms were detached. The remaining 29 holdings were just dwelling houses with a plot of land for gardening (Tschudi 1972).



Fig. 2c. Skoland, 1899. The distribution of the cultivated land before consolidation  
 a — registered No. of each holding, b — farm-building, c — roads, d — fences, e — stone walls

### FUNCTIONAL ASPECTS

What was the way of living in a *tun*? More often than not only the outmark was communally owned. The land of the infield was owned and worked individually but the way of living could not but be heavily influenced by the widespread scattering of plots of land derived from repeated subdivisions which resulted in a complex intermixture of plots on the *tun* as well. At times non-cultivated land or even the outfield was subject to extremely complicated fragmentation of usufructuary rights. A case in point is farm No. 143 in Table 2. Before consolidation this was a small clustered settlement with five farmer occupiers. Of these only one had full use of one holding of wooded land, another farmer had only right of use of the trees in a piece of land, the third one had the right of cutting wild grass, the fourth had a special right to use the oak trees (Tschudi 1972).



Very little evidence has been published about the interdependence of the people living in a *tun* of multiple farms. Some untapped oral tradition is bound to exist as consolidation is fairly recent in many cases. A notable example is from a farm named Todal with 10 holders in Nordmøre county in the western part of Norway. The infield was divided in 213 intermixed plots of varying shape, some not larger than about twenty square meters. The holder with the largest number of plots had 34 in all. The *tun* was divided in similar fashion. After consolidation in 1885 no farming unit had more than two plots of land in the enclosed part of the farm area (the infield) but in 1948 the wooded outmark was still divided in 240 plots. The largest had 38, the smallest 9 pieces of woodland. Besides there were a large number with joint ownership. Grazing and fishing rights were also jointly held.

Under such complicated conditions of ownership and operation the individual holders were dependent on some kind of regulation. In this particular *tun* they were by custom, if not by law, bound to follow a strict set of rules for all aspects of management. These applied to when and how livestock could graze certain fields, at what time the animals should be moved to their mountain shielding etc. The time for plowing and mowing was prescribed as well as for harvesting the grain.

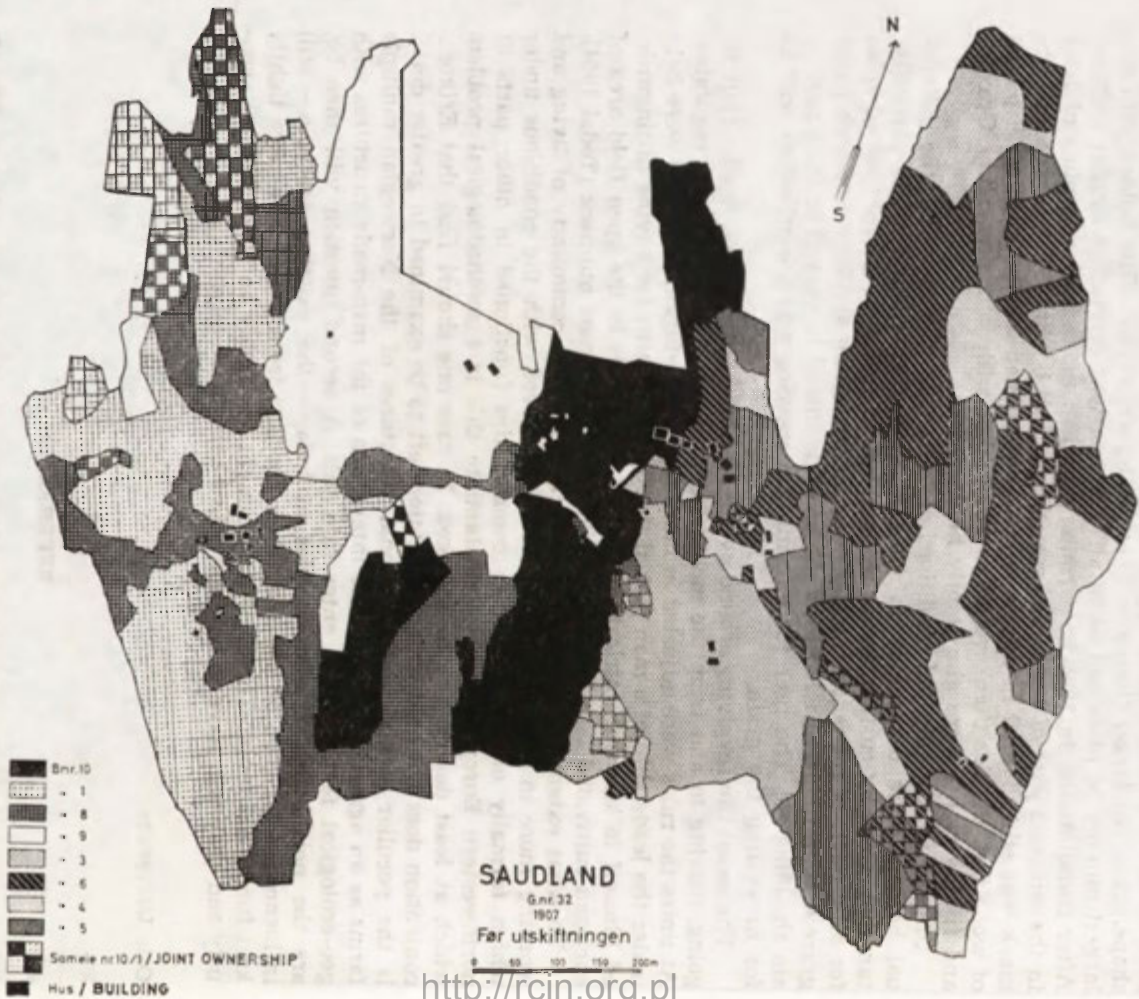
The social life revolving around events like births, marriages, deaths, church-going, moving to and from the mountains in summer time was also regulated. At times the rules were adjusted in more formal get-togethers. These were held under the leadership of a man picked through consensus for having distinguished himself in knowing intricate details of plot limits in the open field area of enclosed cultivated land or in the adjacent non-enclosed outmark (Todal 1954).

To what extent had this kind of freely organized community of living and working more in common than generally believed with the conditions under which formally organized village communities functioned in other parts of northwestern Europe? How to substantiate this is a methodological problem which at least deserves to be attacked. In case one should find that Erixon's contention does not hold water a question left to be examined in greater detail is the peculiar spatial and functional structures of the Norwegian multiple farms as an agrarian ecotype. The interaction of the man-made structures with geo-ecological features will enter into this. A second question will then be, are the neighbourhood communities of today—the existing ecotypes—still influenced—for good or bad—by their heritage from the former more tightly knit functional units? These questions might profitably be tackled simultaneously and they will have to be approached retrospectively.

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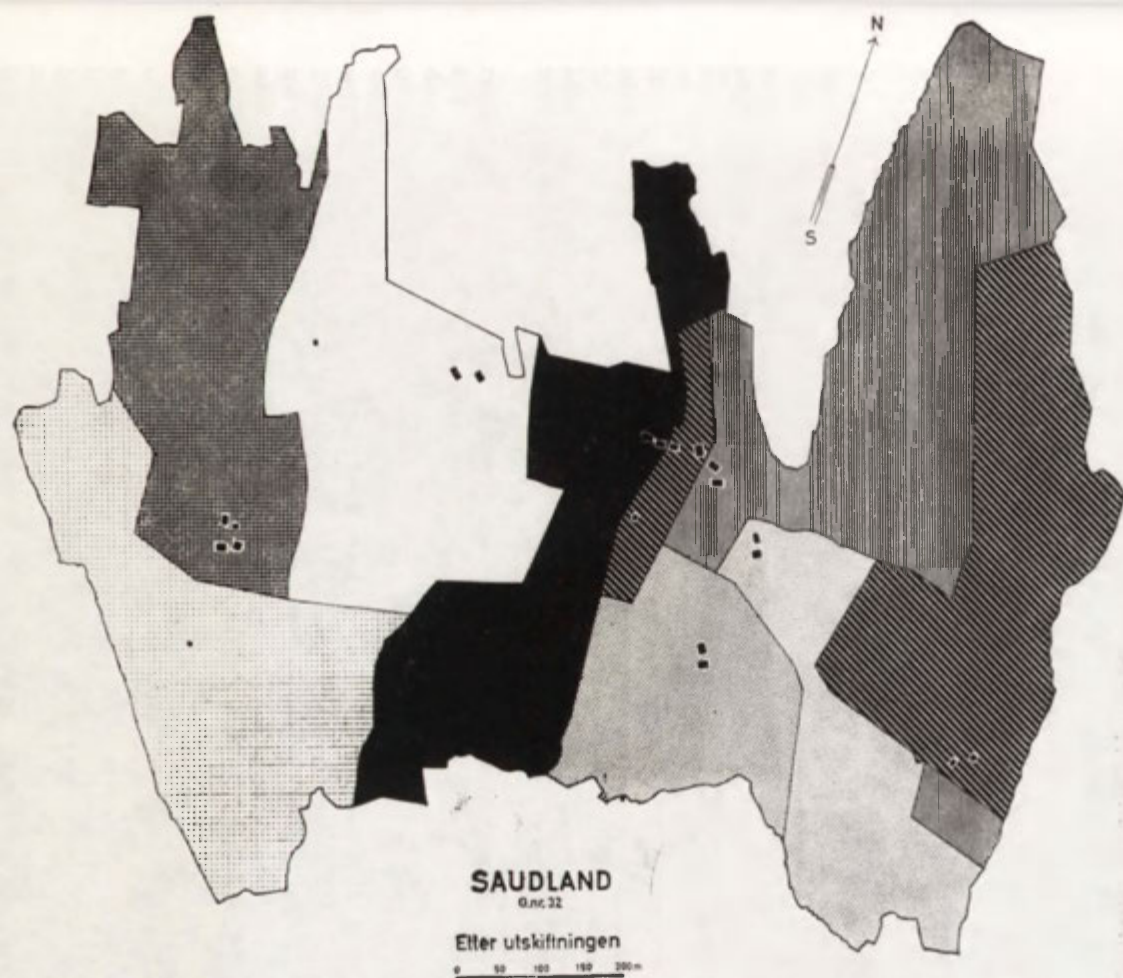


Fig. 3a and 3b. Another farm group (No. 32 in Table 2) before and after consolidation. It consists of 3 farms in a central cluster, one twin farmstead and 4 farms at some distance from the centre. The fragmentation is less complicated than in Fig. 2, the interdependence being mainly due to straight joint ownership of some land



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## CHANGES IN THE FOREST AREA AND THE DEVELOPMENT OF SETTLEMENT IN GREAT POLAND

STANISŁAWA ZAJCHOWSKA

Researches on changes in the forest cover hold an important position in historic geography, especially when they coincide with researches on the development of the settlement network. The two components of geographical landscape, namely forests and settlements comprising arable land, are closely linked and interdependent. The process of enlarging the settled and arable areas in Central Europe in the Early Middle Ages resulted first of all in the reduction of wooded area. In the Early Medieval period the relation of forests and marsh land to settled and cultivated grounds differed notably from the present one. It is generally accepted that at the end of the 10th century only about 25 to 35 per cent of the Polish territory was not covered by forests<sup>1</sup> and marsh land and in the second half of the 20th century the same per cent of our territory is covered by forests.

It should be outlined that in the 10th century Great Poland together with the region of Kujavia was relatively densely settled and had a developed economic system. It became the cradle of the Early Medieval Polish State. Studying the development of settlement we can conclude in an indirect way that the decrease of forests paralleled the growth of settlements and arable land. More precise written sources mention the extirpation of forests in connection with strong settlement waves having started since the 13th century. Sources from the 16th, 17th and 18th century are relatively accurate. However, the most valuable material regarding changes in the forests area is supplied by maps. Reliable and important cartographic materials are available at the end of the 18th century. That is why it is possible to reproduce an accurate map of changes in forest area only for the 19th and 20th century.

The territory of Great Poland is relatively homogeneous in respect to morphology and soil and offers similar conditions of natural environment. In the early settlement period it was covered with forest in about 80 per cent. Historical conditions forming the settlement network were identical because this territory belonged to the oldest part of the Polish State. From that derives its name *Polonia Maior*, meaning the 'seniority' of this province over the remaining part of Poland. Archaeological sources confirmed that numerous rural settlements existed here already in the 6th and 7th century and that fortified strongholds located in this province developed later on into towns. It is estimated that towards 1000 A.D. the average density of population in Poland amounted to 4-5 persons per 1 km<sup>2</sup>, whereas in such a densely populated province as

<sup>1</sup> Changes in the forest area of Poland were studied and elaborated by following authors: M. Dobrowolska, J. Dylik, M. Kielczewska-Zaleska, K. Buczek, F. Piaścik, K. Ślaski, S. Zajchowska and others.

Great Poland even to 16–18 persons per 1 km<sup>2</sup>.<sup>2</sup> In Great Poland there existed at that time about 500 fortified strongholds, among which 80 are mentioned by written sources in the connection with the origin of the organized Polish State<sup>3</sup> ruled from the two first capitals: Gniezno and Poznań.

Forests did not undergo a more intense grubbing in prehistoric and Early Medieval times. Amidst forest areas, there existed sufficient clearings, swampy meadows, riverside hursts and woodless dunes to provide space for ancient settlers. Vast forest areas in the west, north and south part of Great Poland remained untouched by grabbing.<sup>4</sup> The majority of settlements were located on fertile though light soils. The main primary settlement complexes were founded on morainic plateaux: the chief settlement complex was concentrated around Poznań and Gniezno and stretched out towards Kujavia (Kruszwica), reaching the Vistula, the second one occupied the area around Kalisz and Sieradz, the third settlement complex, less densely populated and of lesser importance over the southern part of Great Poland joined the settlement complex of Głogów belonging to the province of Silesia.<sup>5</sup> Settlements were founded not only by liege lords, but also on their order by convents and churches.

In the middle of the 12th century Great Poland underwent important changes in its economical system and achieved stabilization of its legal forms. An inner colonization took place on the Polish Law and according to western models. This was realized against the background of important socio-economical transformations occurring all over Poland. In the 13th century begins the growth of the commodity and market economy which continued until the middle of the 15th century. It was a complicated process which affected production relations in villages and towns. This period is also marked by the arrival of the big settlement wave, called 'colonization according to the German Law', because of its legal forms based on a western model and introduced in Poland by German settlers. A large scale extirpation of forests was undertaken by new settlers brought either from central Poland or from West-European countries; new villages were founded according to the rent law.<sup>6</sup> This process of settlement is in fact a continuation of the internal 'colonization according to the Polish Law', practised by liege lords already in the 12th century. Old cities as well as newly founded towns underwent a considerable development. The network density was the highest in the central part of Great Poland where 1 village fell for 8–10 km<sup>2</sup>, while in external areas 1 village fell for 17–20 km<sup>2</sup>. It must be outlined that the town network in Great Poland was more dense than in any other province of Poland.

New settlements were formed of all areas of forest extirpation with fertile soils, in the vicinity of important administrative, commercial and religious centres. Settlements rarely used to be founded on sandy soils. It can be assumed that

<sup>2</sup> H. Łowmiański, *Podstawy gospodarcze formowania się państw słowiańskich* (Economic foundations of Slavic states creation), Warszawa 1953, p. 244.

<sup>3</sup> W. Kowalenko, *Grody i osadnictwo grodowe Wielkopolski wczesnohistorycznej* (Fortified strongholds and the settlement pattern of Great Poland at the beginning of its history), Poznań 1938, p. 88 ff.

<sup>4</sup> K. Hładyłowicz, *Zmiany krajobrazu i rozwój osadnictwa w Wielkopolsce od XIV–XIX w.* (Landscape changes and settlement development in Great Poland in the 14th–19th century), Lwów 1932, p. 51.

<sup>5</sup> A. Wędzki, *Materiały kartograficzne do Atlasu początków historii* (Cartographical sources useful for an Atlas of the Beginning of History), Warszawa 1959.

<sup>6</sup> Z. Kaczmarczyk, *Kolonizacja niemiecka na wschód od Odry* (Colonization according to the German Law eastwards of the Odra River), Poznań 1946, pp. 92–99; Z. Kaczmarczyk and M. Szczaniecki, *Kolonizacja na prawie niemieckim a rozwój renty feudalnej* (Colonization according to the German Law and the development of feudal rent), *Czas. Prawn. Hist.*, 3, pp. 61–68.



until the middle of the 15th century the settlement network in Great Poland was already formed in its main outline (about 70 per cent of rural settlements and 80 per cent of towns).<sup>7</sup> Such a strong development of settlement must have resulted in a considerable decrease of forest areas, especially in the west and south part of Great Poland. Its northern forests together with the marshy Toruń-Eberswalde *pradolina* were still very scarcely populated and covered with primeval forests. After this period of a large colonization wave, the proportion between the forest area and the area taken for settlement and under cultivation reaches slowly its balance.

The subsequent period, lasting until the end of the 16th century, brought considerable changes in agricultural system. The farm economy producing goods for sale develops due to the organization of a convenient corn market for internal and external trade. Consequently new farms arouse in great number, often in already existing villages. At the same time arable land was enlarged, although in comparison with the preceding period relatively few rural settlements were newly created. In the 15th and 16th century the number of newly founded settlements amounted only to 26 per cent of the settlement network existing at the end of the 16th century. Its density in the central part of Great Poland was relatively high. One settlement fell here for 6–8 km<sup>2</sup>, while in peripheric parts\* one for 14–15 km<sup>2</sup>.

In Poland the feudal system approached its decline in the 17th and 18th century, a period that brought about considerable social and economical changes. Numerous wars devastated the country, hindered its economical development and decreased the number of population. Towns suffered destruction, handicraft and trade together with export of corn underwent a considerable downfall. Farms were reduced to poverty and some abandoned rural settlements were even invaded by forest. The midst 17th century destruction and decline was followed by a turn in the development of the rural system which increased the number of petty farmers or even farmers deprived of their farmland. After a period of wartime only rich landed aristocracy possessed sufficient funds to organize anew the rural economy. They settled peasants on farms and in areas abandoned during wartime. Foreign West-European colonists were brought to Great Poland mainly from Holland and Germany. At settling, they were granted specially favourable legal conditions, which affected the whole rural system in this province.<sup>9</sup>

Considering the fact, that morainic plateaux with better soils were already settled in past centuries, new settlement areas had to be searched on light sand soils hitherto covered with forests or on marshy and wet grounds. The *pradolinas* were drained and reclaimed in the Dutch manner. Forests underwent grubbing to a higher extent. A special type of villages was founded on newly claimed areas to meet this particular type of economy, namely row villages on marshy soils and dispersed villages in forests.<sup>10</sup> The 18th century was the last period of mass forest cutting which reduced the forest area to less than 30 per cent of the whole Great Poland territory. The biggest forest vastage occurred

<sup>7</sup> S. Zajchowska, Développement de l'habitat en Posnanie, *Przeegl. Geogr.*, 32, 1960, *Suppl.*, pp. 227–234.

<sup>8</sup> S. Zajchowska, Rozwój sieci osadniczej Poznania i najbliższego zaplecza w średniowieczu (The development of settlement network on the territory of Poznań city its neighbouring hinterland in the Middle Ages), in: *Początki i rozwój Starego Miasta w Poznaniu do XV w.*, Poznań 1973, p. 48 ff.

<sup>9</sup> J. Rutkowski, *Historia gospodarcza Polski* (Poland's economic history), vol. 1, Poznań 1947, p. 249 ff.

<sup>10</sup> W. Rusiński, *Osady tzw. Ołędrow w d. województwie poznańskim* (The so-called 'olendry' settlements in the former Poznań voivodship), Kraków 1947, pp. 7–13.

in the western and northern part of Great Poland known hitherto for its vast forest complexes. Unfortunately such a steady cutting of forests has contributed to the beginning of so harmful process of 'steppization'. Deforestation involved also serious changes in the natural environment, by destroying its balance and by causing big floods, degradation and washing away of soils, etc.<sup>11</sup>

Despite of a strongly developed colonizing action, the number of newly founded settlements was insignificant throughout the whole 17th and 18th century. The localities abandoned during long-lasting wars were resettled and new settlements established mainly in *pradolinas* or forests with sand soils. This growth of settlements in relation to the already existing network amounted at this period to only 10 per cent and only 11 new towns were founded. In the 18th century, in Great Poland 1 town fell for 149.25 km<sup>2</sup> and 1 rural settlement for 7.7 km<sup>2</sup>.

Since the turn of the 18th and 19th century after the appearance of more accurate maps, it was possible to calculate the changes in the forest area more precisely. In Great Poland two maps were issued at that time, namely the map of Gilly and the map of Goul. Utilizing these two maps and some other maps<sup>12</sup> and written sources I plotted by means of the retrospection method a map reproducing changes in the forest area for the period between the end of the 18th and the middle of the 20th century (Fig. 1 at the end of this volume). The said map allowed me to calculate the proportional decrease of forest areas and to correlate this phenomenon with settlement and rural economy.

A precise analysis of changes having occurred in the forest area throughout the 19th and 20th century, considered against the background of political as well as socio-economic transformations linked with various settlement processes, enables me to draw some interesting conclusions. At this period the historical background was sinister for Poland. The country lost at the end of the 18th century its statehood, divided by three neighbouring powers, Prussia, Austria, and Russia who annexed Polish territories and deprived Poland of its political liberty. The partition of the country hindered for about 50 years its social and economic development. Great Poland was divided by two powers: Prussia annexed its north and west part, tsar's Russia its smaller east part with Kalisz and Konin.

During the 19th and at the beginning of the 20th century the developing capitalism brought considerable modifications in the socio-economic system of our country. The act of affranchisement of peasants had a large repercussion in settlement and in the rural economy. In the Prussian sector only wealthier peasants were affranchised, while petty farmers, deprived of their farmland, had to move as rural workers to landed estates or to towns to find employment in the developing industry. Prussian authorities introduced a consequent action of colonization by purchasing land from Polish owners and by settling German population there. In fact, this action did not lead to the foundation of many new villages, but rather to a growth of the number of population in hitherto existing rural settlements and towns. In the Russian sector the affranchised peasants received small land patches where they built small hamlets or poor dispersed farms. The majority of the farmers deprived of their holdings, moved to towns or took up employment in landed estates. At this time not a single new town was founded. The existing network of towns proved to

<sup>11</sup> See the enclosed map (Fig. 1).

<sup>12</sup> Gilly, *Spezialkarte von Südproussen*, 1:155,200, 1802/03; E. Goul, *Mappa topograficzna, wojskowa i statystyczna części Wielkopolski* (A topographic, military, and statistical map of the part of Great Poland), 1:86,000, 1807-12; D. G. Reymann, *Topographische Spezialkarte von Mitteleuropa*, 1:200,000, 1805.



be too dense for the needs of this agricultural region which lacked any stronger stimulus of an industrial development.

In the 19th and 20th century the process of changes in the forest and arable area, as well as the development of settlement proceeded in Great Poland in a somewhat different manner than during earlier periods. These changes completed only to a small degree the hitherto action of deforestation undertaken to produce more arable land. All areas with better soils were used for plant cultivation already in the past and even sandrus were grubbed. At the beginning of the 19th century the forest area in Great Poland amounted to over 30 per cent of the whole region's surface. Calculations on the basis of forest maps dating from the end of the 18th century and from the middle of the 20th century proved that the decrease of forests continued and diminished the existing forest area by about 20 per cent. This process occurred mainly in the eastern and south-eastern part of Great Poland where the forest area was already small. However, the reduction of forests was not linked with the foundation of new settlements, but rather with the enlargement of arable land. A detailed examination of cadastral maps concerning selected areas showed me to what a degree the biological balance was disturbed by an excessive deforestation in the past. Many sandy grounds turned into shifting sands and some villages located on these grounds were abandoned. In the 20th century, and especially after World War II, state authorities initiated an action of ground rationalization and proceeded to reafforest unfertile land. In the post-war period the forest area in Great Poland grew from 20 per cent in 1950 to over 24 per cent in 1974. Such a growth might seem relatively small, but it must be reminded that the advanced level of agriculture in Great Poland does not promote the process of afforestation. That is why the area covered by forests in this region remains rather smaller in comparison with other regions of Poland.

The problem of the spatial differentiation of forests and of changes in the forest area throughout past centuries requires further and more precise researches. Such researches, performed in co-operation with botanists, would enable us to reconstruct in a more accurate way the ecological environment and to single out the most favourable conditions which reigned in the past and may be supposed to serve as an adequate base for an optimal modern economy.

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## A REPORT OF THE EXCURSION, 5th TO 7th SEPTEMBER, 1975

## THE FIRST DAY

The first day of the trip runs through the southern part of Mazovia, the territory of Łowicz and Eastern Kujavia. Mazovia after the extinction of its own line of Piasts, 1526 was incorporated into the Kingdom of Poland. Because of this the Mazovian people are marked by specific ethnic and linguistic features added to which rural settlement has many distinctly formed elements. Southern Mazovia, through which the excursion route led, stretches to the south from the Warsaw Basin. It is part of the moraine upland of the glaciation of Middle Poland which ends in the south with the low banks of terminal moraine (Rawa Upland). Part of the area stretching from Grójec to beyond Rawa forms an old settlement region with average to good soil types. Grójec was the centre of a castellany in the eleventh century, Rawa the capital of a voivodship. At the present time the development of the Warsaw fruit and vegetable sub-region can be witnessed in these areas. There are numerous individual farms with orchards organized in the modern manner (apple and pear trees). An example of such a farm was observed in the village of Belsk Duży. This village was still nucleated in the nineteenth century but today with the growth of orchard farming many scattered farms have arisen located beside their orchards. These farms have not only attractive farmhouses but also cool storage facilities for fruit.

The research centre which encourages the development of orchard cultivation in the sub-Warsaw region and exerts its influence all over Poland is to be found in Skierniewice where the members of the trip had the chance to become acquainted with the organization and work of the Institute under the directorship of Professor Pieniążek.

On the road from Skierniewice to Łowicz the party halted in Nieborów to examine the changes in settlement related to the disintegration of the great landed estates in Mazovia. Nieborów is an example of a great estate which arose around the residence of a magnate. There was no urban centre or market here as under the feudal medieval system. But in the sixteenth century Nieborów was still a small gentry village, the centre of a parish. The consolidation of land began at the end of the seventeenth century and continued during the following centuries, embracing a considerable number of villages. The lands of the Nieborów estate lay partly on the moraine and partly on the alluvial sandy summits sloping towards the River Bzura forming the southern bounds of the Warsaw Basin. The Nieborów estate consisted of ten *folwarks*<sup>1</sup> and a considerable area of forest. From 1774 to 1945 it was in the possession of the Radziwiłł family. In 1945 the lands were parcelled. The palace built at the end of the seventeenth century, designed by Tylman from Gameren, is now a museum; it contains many relics of the Radziwiłłs, one of the greatest Polish-Lithuanian

<sup>1</sup> Unit of agricultural production related to the English manor-farm.

families. In 1945 the land was divided among the *folwark* workers and peasants in such a way that the average size of the farms did not exceed 5 ha. This was a typical parcel size for the period just after the war. A significant part of the population — which obtained land at a distance from the centre — built on their holdings. As a consequence small-scale and dispersed rural settlement grew up in the old estate area. This phenomenon, which was linked with the need to distribute land among the largest number of families immediately after the war, is not well suited to agricultural modernization and has been undergoing further transformation particularly in recent years. In 1970, for example, there were in Nieborów 193 farms of which 149 were above 2 ha in size.

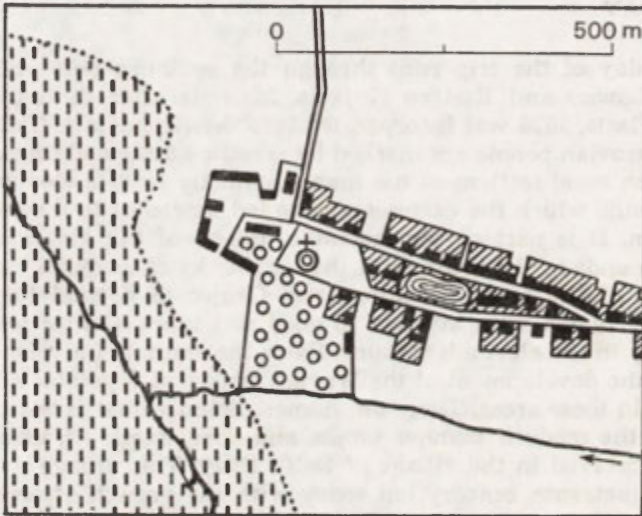


Fig. 1. Złaków Kościelny by 1900

Łowicz, the town in which the party stopped for dinner, is situated on the Bzura River. In the tenth century it was the centre of the Łowicz castellany, a significant part of which together with its main centre was granted (in the eleventh century) to the archbishopric of Gniezno, the first to be founded in Poland. The primate of Poland, the archbishop of Gniezno, had his residence in Łowicz; this was beautifully decorated in the renaissance style and was compared with the castle on the Wawel in Cracow. The palace was completely destroyed in the wars of the seventeenth century, and at the present time only fragments of the building are visible on the Bzura River. There are more reminders of the bishops' rule in the cathedral. The archbishop of Gniezno was *primus in senatu* and therefore bore the title of duke while the Łowicz estates were known as a duchy and their inhabitants as *księżacy* or 'Dukes' men'. The local population had a distinctive folk costume, building style and customs which have been partly preserved in a relict form.

The development of this ethnically individual region can be ascribed to the fact that this whole compact area was for almost eight centuries (up to the partitions) in the hands of one landowner and as such experienced similar agrarian reforms and economic organization. In the thirteenth century there were 100 villages, in the sixteenth century 130. The number of villages grew through the clearance of forest and systematic settlement. In the fourteenth century Bishop Bogoria Skotnicki conducted a specially intensive programme of colonization. In this period small settlements were united to form larger units



creating new and ordered villages 'on rent', at the same time the arable area was increased by forest clearance.

The party was able to become acquainted with two villages of the old Duchy of Łowicz, their ethnic inheritance and the spatial structures of their settlement. These villages were Złaków Kościelny and Złaków Borowy.

Złaków Kościelny, the parish centre which can be found mentioned in 1334 is a village older than this reference. Within its bounds have been found objects of the Roman era (coins). The village has a plan of an oval shape, at one end it abuts onto a wide and marshy river valley (Fig. 1). Earlier it could have been an oval village (*ovalnica*) with a green and one entrance. Later in the fourteenth century a church was built on the side facing the valley, this being frequently rebuilt. As time went on two sets of buildings arose near to the church, one group belonging to the manor farm of the church and the other to the farm of the village headman. There are a few remaining traces of these buildings near the present presbytery.

In the nineteenth century the village underwent regulation, the *niva*<sup>2</sup> three field system was abolished in favour of the 'strip' field system. Part of the farms moved into the area of newly allotted parcels. One can assume that the old centre of the village with the oval green was preserved because of the existence of the church, around which had arisen a very compact area of buildings. Neither the width of the farmhouse plots nor the size of the modern farms corresponds to the original ancient dimensions. In the twentieth century a concrete reservoir was built in the middle of the green to serve as a water supply and as a fire precaution. The centre of the green had previously been occupied by the homes of landless cottagers.

The neighbouring village of Złaków Borowy was newly settled in the fourteenth century of an area cleared of wood and is distinguished from Złaków Kościelny by a different spatial structure and topographical position. This was a regular street-village located in the middle of the fields forming regular measured *nivas*. It is obvious that this village was founded according to a plan imposed from above. In the nineteenth century, however, it underwent radical change. The street village morphology disappeared and was replaced by two loose and dispersed rows of farmsteads, a 'strip'<sup>3</sup> field system and buildings adjacent to the fields; only the old road remains lined with a few trees to remind one of the former street-village (Fig. 2).

These two villages observed near Łowicz allow one to appreciate how variable are the forms and period of origin of the street and green villages in Mazovia. It is difficult to include their different geneses in one scheme.

From the territory of Łowicz we travelled into the Płock region of Mazovia. Płock, the oldest capital of Mazovia was the residence of Polish dukes and kings. Near Płock on both the left and right banks of the Vistula were situated a fair number of Crown Villages. They included Sanniki, Zdwórz and Łąck, through which we passed. These villages in the sixteenth century were large, compact and adapted to the three-field system. They were significantly transformed in the nineteenth century when many small scattered farms were established. Nucleated settlement only arose in those villages which were the centres of parishes or large residences, e.g. Łąck.

Mazovia borders in the south-west with Kujavia. In Eastern Kujavia we passed through Włocławek, its main centre, noticing many industrial concerns

<sup>2</sup> *Niva* — a plot divided into as many parts as tenants in the village. The village fields consisted of a certain number of *nivas* which were roughly arranged in three parts upon which a three course rotation was practised.

<sup>3</sup> Not strips in the medieval sense but long and wider compact holdings.

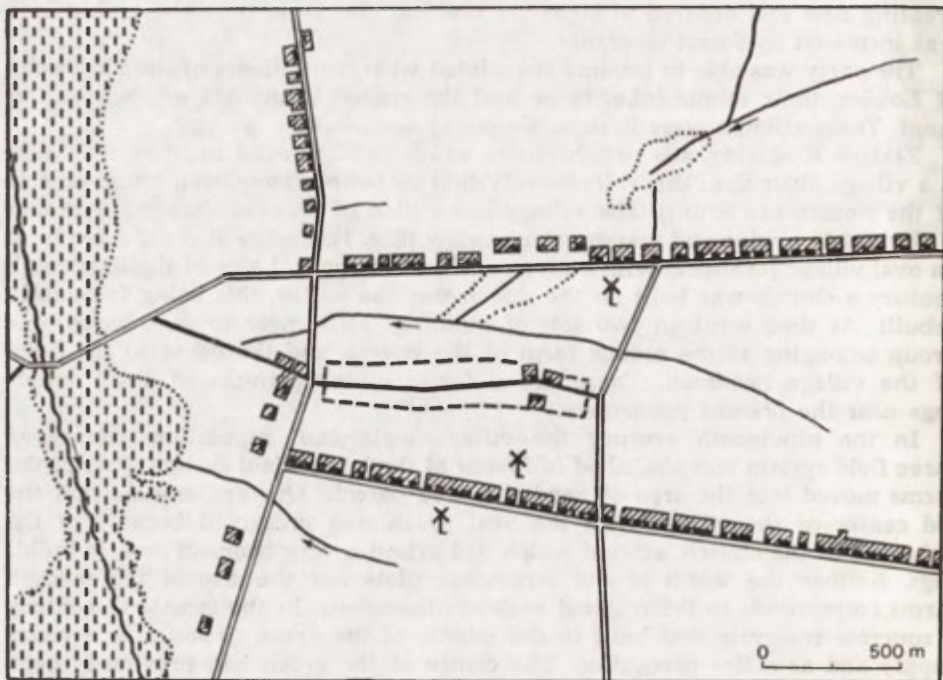


Fig. 2. Złaków Borowy. The situation of the regular 14th-century street village is marked by a dashed line

but not stopping until we reached Plebanka near Nieszawa. Here there is a production co-operative which has been in existence since 1954 and has been developing well. In the nineteenth century Poland had some tradition of collectivized forms of rural economy but as a result of certain attempts to introduce collectivization through administrative methods in the early 50's, farmers have now little faith in this type of farming. It was not until after 1970 that the movement towards the establishment of small-scale spontaneously developing collectives and groups co-operating with each other was revitalized. With such highly fragmented landownership this is the only way of introducing modernization into agriculture and this is being appreciated more and more by the farmers themselves. Plebanka is an example of a successful co-operative. It is 200 ha in size and has thirty-eight members. It specializes in horticulture and fruit growing and possesses well organized facilities for this purpose. New accommodation has also been built, predominately one family houses located along the road within small gardens. The party stayed the night in Toruń (pop. 140,000), a town with many monuments of the medieval period and interesting modern buildings.

#### THE SECOND DAY

The subject of the second day's study was the settlement of two historico-geographical regions, Kujavia and the neighbouring part of north-east Great Poland (the Gniezno Lakeland). These two physiographical units were formed by the last Baltic glaciation which produced a characteristic ground moraine landscape. This is plateau land diversified by hummocks of terminal moraine



with small enclaves of outwash and sand dunes. The Kujavia Upland is lower and fairly flat, the higher Gniezno Upland is more hilly with coniferous forest complexes on the more elevated sandy areas and groups of mixed woods on the claylands. Numerous post-glacial lakes form long chains linked by rivers and streams. Such natural features form a picturesque landscape of an attractive tourist quality in these two regions.

Kujavia, which preserved its distinctive political and ethnic character up to the fourteenth century, is divided into two parts, forest Kujavia and field Kujavia. The former, also called White Kujavia from the sandy lightly leached soils, extends over the high terrace of the Toruń-Eberswalde *pradolina* falling towards the Vistula via a slope up to fifty metres in height. Field Kujavia is situated on the southern part of the Kujavia Upland and is called Black Kujavia because of its fertile black marsh soils. Field Kujavia with its favourable terrain and good soils was settled earlier and has long been intensively exploited by agriculture. Archaeological investigations have confirmed the development of permanent forms of agriculture in Kujavia in the New Stone Age, but the beginnings of man's activity in these areas can be assigned to the end of the Palaeolithic era. There is also evidence of settlement in the Gniezno Lakeland at this time.

The tribe 'Polani' having settled in the Gniezno region, began to spread from here into the remaining parts of Great Poland and Kujavia in the ninth century, uniting the territorial units of the surrounding tribes into one state organization in the tenth century.

The excursion route led through the oldest settled districts of both regions. There are many settlements of ancient origin and with interesting processes of historical change, but unfortunately time permitted a close examination of only a few of them. The most characteristic places of both regions which illustrated most clearly the problems of the conference were selected as places to stop and visit.

From Toruń the road ran south-westwards through White Kujavia to Gniezno (mentioned in 1185), to the north of which lies the border between White and Black Kujavia, and then on to Inowrocław, the largest town of this part of Kujavia with developed engineering, chemical, glass and food industries. There are rich deposits of Permian salt to be found here which were first exploited towards the end of the nineteenth century. Associated with them are iodine-bromide salt springs which emerge on the surface; around them arose the well-known centres of balneotherapy. The town developed from a market settlement mentioned in 1185 and received its charter in 1240.

Beyond Inowrocław the road crosses the River Noteć and leads along a valley to the largest of the finger lakes, the Gopło, once called *Mare Polonorum*, (23.4 sq.km, length 26 km, maximum depth 15.7 m). The Gopło environs belong to the oldest settled territories of Poland. The tribes inhabiting the sides of the lake derived their name from the lake and were called the Goplani which contains the ancient Slavonic element *plo* meaning an open area of water. The centre of the settlement was Kruszwica, a fortified site established around 500 A.D. on one of the islands of the lake. There arose beside the fort on the crossroads of the Amber Trail from the Baltic to Central Europe with the trading route from West to East, a trading settlement which in time grew into an important tribal centre. In the tenth century it was one of the strongest centres of Piast Poland and the seat of the Kujavia bishopric but even before the close of the same century it began to lose in importance to Inowrocław and Włocławek. The transfer of the bishops' seat to Włocławek in 1160 settled its fate. The granting of urban rights in 1422 and the support of rulers prevented the final



fall of Kruszwica but did not manage to restore its earlier splendour. In the twentieth century food industries began to develop, oil and sugar refineries and vintners. The town is now a famous centre of water sports.

In the early medieval period service settlements arose near Gopło, the inhabitants of which were obliged to perform particular services for the needs of the duke and the fort. One of these ancient settlements, Kobylniki, was visited by the members of the excursion. The population of Kobylniki (*iumentarii*) were involved with the duke's stud and the rearing of horses. In the nineteenth century there was a capitalist *folvark* here. After World War II the centre of a 'Combine of State Agricultural Farms' was located in the village which was engaged in cattle rearing. The settlement network of the Combine is composed of the old *folvarks* of the local estates organized into eleven production units.

The old settlement of the Gopło region was significantly transformed in the course of history, particularly latterly as a result of the newest processes of change in the countryside. Nonetheless traces of old spatial forms persist in some of the settlements. One of these in Sławsko Wielkie, a village lying to the west of Kruszwica, where the original oval form (*ovalnica*) has survived. The village name is very ancient and indicates settlement during the clan-tribal period.

The route led on towards the west into an area of old estates of the early medieval monasteries of Strzelno, Mogilno and Trzemeszno. The Gniezno archbishopric also had its estates here and Crown estates form only a small percentage in this region.

A short stop in Strzelno allowed a visit to be made of the Romanesque remains of the twelfth century. The next stopping place was Kwieciszewo, an interesting example of a settlement with a complex past. This was a market centre which arose in the eleventh century beside a fort established on the frontier of Kujavia and Great Poland. It obtained its charter in 1342. The town, however, developed slowly and the main occupation of the inhabitants was agriculture. Despite this Kwieciszewo did not lose its town rights until the end of the nineteenth century. The town did not acquire a town plan with its charter; there survives to this day the structure of the old village with a crossroads forming a triangular space in the centre of the settlement (Fig. 3). The centre of the square is occupied by the circular earthworks of a prehistoric fort of the eighth century. The present landownership structure is complex. The majority of the land belongs to individual farms. An agricultural enterprise was established on former church land after the war belonging to the State Combine in Szczeglina; young beef cattle are reared, mainly for export.

Also on the frontier of the historical regions of Kujavia and Great Poland is Mogilno, a town spreading over a rise which overlooks the picturesque Mogilno Lake. At present it is a service centre with light metal and food industries. It was originally a border fort of the seventh century with a castle borough. In 1065 Bolesław the Bold established a Benedictine monastery on the castle hill which was linked with the monastery in Tyniec near Cracow. The fort was then rebuilt on the other side of the lake and connected by a bridge with the old castle borough, now a monastic settlement. Not long ago traces of the construction of the bridge were uncovered on the bottom of the lake. In 1398 Mogilno received its town charter. The oval form of the original market-village with a large oval internal space adapted to the topography persists in the town plan. A group of monastic buildings was also preserved dating from the eleventh century (the church and part of the domestic buildings).

From Mogilno the road turned to the north passing former monastic villages on the way, at present mostly villages of small individual landholdings



Fig. 3. Kwieciszewo. A contemporary aerial photograph. An old settlement centre of the 8th century situated near a fort. A triangular square can be noticed

with the morphology of the original street village or the row villages derived from nineteenth century regulation. Beyond Dąbrowa the road crossed the frontier between Kujavia and Great Poland leading to the historic lakeland of Pałuki lying in the northern part of the Gniezno Upland.

Here in the complex of lakes drained by the Gaśawka, a left bank tributary of the Noteć River, and surrounded by better quality leached soils is found the centre of the settlement of Pałuki with its capital Żnin (in the tenth century a ducal fort, charter 1265). On the edges of the valleys of the drainage network of this region and on the dry holms within the valleys traces of settlement of the Early Iron Age (700-400 B.C.) were discovered in the early 1930's. The members of the excursion visited the settlement in Biskupin.

The settlement arose around 550 B.C. on an island near to the shore of a lake. This was a defensive site surrounded by earth and timber ramparts and a series of breakwaters. A gatehouse and a bridge built out from the marshy lakeside led to it. The original settlement was destroyed by Scythians in the La Tène period (at the end of the Łużyce period). Later a new fortified settle-





particularly the fertility of the soil, influenced the early growth of settlement in Chełmno Land. The original compact villages were considerably transformed in later years, particularly after the partition of Poland. Two main forms developed at this time, manor settlement and the colonies which arose out of reform, emancipation and the redistribution of the great estates by the Prussian government. After 1945 the majority of estates fell into the hands of the state and were either preserved with little change as State Agricultural Enterprises or were parcelled out. Dispersed settlement grew up on the distributed land.

The Drwęca River divides two historical units, Chełmno Land, on the right bank, and Dobrzyń Land, on the left bank. In the Middle Ages it was the border with the Teutonic state and from the nineteenth century for over a hundred years the political frontier between the Prussian and Russian partition zones.

Dobrzyń Land is a typical agricultural region not greatly industrialized and delayed in development because of its peripheral location after the partitions in the nineteenth century. On the border of Chełmno and Dobrzyń Lands lies Golub mentioned in 1254. It is a medieval town which arose in the meander of the Drwęca. On the edge of the moraine upland on a steep hillside the Teutonic Knights erected a defence castle which survives to this day. It was rebuilt in the seventeenth century when it was owned by Anna Wazówna the sister of Poland's King Sigismund Vasa III. Dobrzyń was originally the suburb of Golub but on the other side of the river in Dobrzyń Land from whence comes its name. It obtained its charter in 1786.

From Golub the road led across the Drwęca valley along well-formed terrace levels. In the neighbourhood of the village of Węgiersk there is a wide view onto the drumlin fields from the high slope of the gorge. The majority of the drumlins are in the form of elongated mounds with a length of about 1200 m to 2500 m with parallel axes. The settlement of the region described above is particularly scattered. The dispersed settlements arose during the seventeenth and eighteenth century colonization. The only large and nucleated village is Zbójno, a traditional service centre (mentioned in the thirteenth century). Further on we passed through Lipno, the centre of Dobrzyń Land (charter 1349, pop. 11,000). This is a typical local centre with a predominant administrative and service function.

Twelve kilometres to the west of Lipno is Skepe. This forms an interesting settlement group composed of three settlement units of various ages situated on board of two lakes. The remains of early medieval settlement are present in the fort earthworks on the Święte Lake. A market settlement, oval in shape, arose beside the fort on the isthmus between two lakes, this was on the trade route leading from Lipno to Sierpc. The settlement obtained its charter in 1449 and lost it in 1867. It was distinguished by a considerable development of craft industries which even today have several representatives and which are growing fairly well.

Wioska Skepe which arose in the Middle Ages near the market settlement, became the feudal centre of the Skepe estates to which the town belonged. After the enfranchisement of the peasants in 1867 a large capitalist *folvark* arose here. At the moment a state farm occupies the old *folvark* buildings. In 1498 the owner of the Skepe estate founded a Bernardine monastery named Wymyślin which became famous as a centre of pilgrimage connected with a holy picture of St. Virgin. The tradition of pilgrimage and the celebration of feast-days persist to the present day. The former Bernardine Baroque church is deserving of attention. Schools now occupy the earlier monastic buildings.

These three different settlements units lying close to one another have been undergoing change recently and are coalescing into one complex supplying services linked with agriculture. From Skępe the road runs through outwash and undulating ground moraine country in the Płock Upland and from Modlin to Warsaw through the Warsaw Basin strewn with fluvio-glacial sands. This is the historic region of north Mazovia whose general development was retarded in feudal times by regional fragmentation, the frequent attacks of Prussians, Lithuanians and Jaćwingians and in the nineteenth and twentieth centuries by the deliberate policy of the occupying powers.

The low fertility of the soil, the relatively large forests and lack of mineral resources restricted the development of the economy, settlement and the great landed estates. As a result this was an area of numerous though poor settlements of petty gentry.

Modern farming, besides a few co-operative and state farms is characterized by great fragmentation and relatively low production levels. Only the sub-Warsaw zone within a radius of 70 km from the city is marked by high yields in market gardening and fruit growing (raspberries and strawberries).

*Maria Kielczewska-Zaleska*

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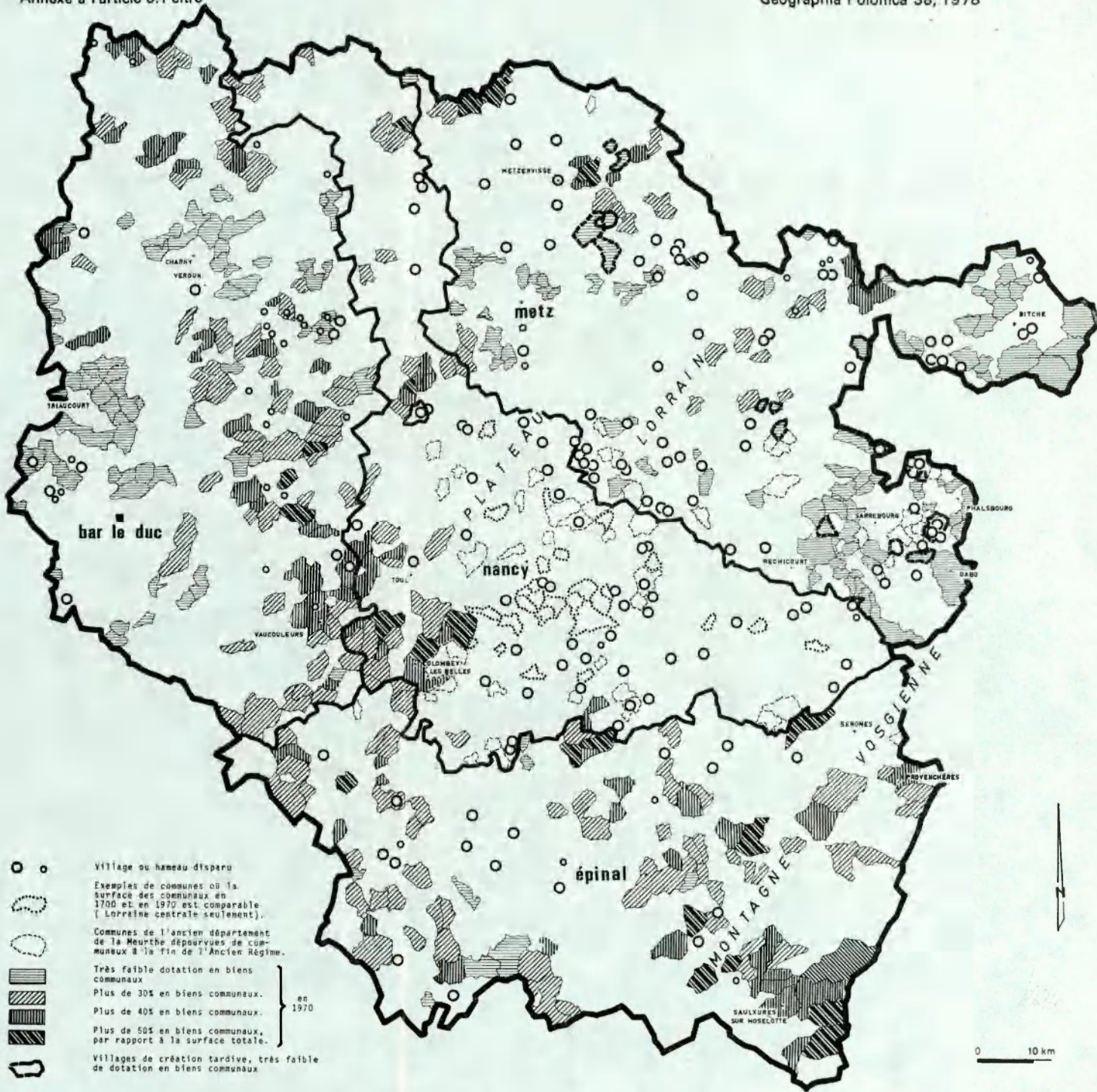






Fig. 1. Forests in Great Poland in the 18th and the 20th century  
 1 — forests in the 20th century, 2 — forests from the late 18th century, 3 — the boundaries of the Poznań voivodship (1960), 4 — the boundaries of voivodships that existed on the territory of Great Poland in the 18th century





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Fig. 1. Biens communaux et désertions rurales en Lorraine

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