The 'Armament of the Village'
Agricultural Restructuring in Mountainous Areas in Nazi Germany

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In my presentation I would like to stress the following points:
- first, the introduction of 'high modernism' as an ideal type of rural planning;
- second, the phase of scientific assessment;
- third, the phase of organisation building;
- fourth, the phase of project planning;
- fifth, the phase of project implementation and evaluation;
- sixth, the conclusion about 'ambivalent modernism' as a real type of rural planning for mountainous areas in the Nazi era.
Any historian talking about agriculture in the twentieth century can hardly avoid the topic of \textit{planning}. It seems that planning at national and supranational levels is one – if not \textit{the} – key feature of agricultural development in the past century, in mountainous areas as well as other regions. A decade ago, James Scott (drawing on case studies of large-scale state planning in the Soviet Union, Brazil and Tanzania) put forth the concept of \textquote{high modernism}:

\textquote{High modernism is thus a particularly sweeping vision of how the benefits of technical and scientific progress might be applied – usually through the state – in every field of human activity.} \cite{Scott1998, p. 50}

\begin{itemize}
\item legibility of a society \rightarrow capacity
\item ideology of \textquote{high modernism} \rightarrow desire
\item authoritarian nation-state \rightarrow determination
\item incapacitated civil society \rightarrow terrain
\end{itemize}

In the following exploration I am going to use this concept as an ideal type of state planning. My aim is to compare \textquote{high modernism} as outlined before with the case of rural planning for mountainous areas in Nazi Germany, i.e. to contrast this \textit{ideal} type with a time- and space-specific \textit{real} type. In my case, four phases can be distinguished: first, the scientific assessment of the \textquote{mountain peasant} problem; second, the buildup of organisations to deal with this problem; third, the planning of projects for problem-solving; and, fourth, their implementation and evaluation.
This leads me to the first phase of rural planning for mountainous areas in Nazi Germany, namely scientific assessment. The problem of the 'mountain peasantry' came onto the political-economic agenda not before Austria's annexation to the German Reich in 1938. This was due to the natural conditions of agriculture in former Austria. As you can see on this relief map, Austria was a country where mountains shaped the landscape. [CLICK] To be more precise, in 1934 nearly three quarters of of the area (see the green segments) belonged to mountainous regions. And nearly half of the farms were located there.
Regarding land use, there were strong correlations between the proportion of arable land, other agricultural land (mainly grassland) and other farmland (mainly forests) on the one hand and altitude on the other hand. In short, land use in the mountains was shaped by forests and grassland which provided forage for livestock breeding.
Thus, in 1938 mountain farming became a significant fact or of German agriculture. The Nazi regime’s demand for reliable information on mountain farming was met by scientific studies offering up-to-date data. I have selected three studies which seem to have considerably attracted the attention of decision-makers as well as agricultural experts:

- In 1939, the Vienna Institute of Economic Research published in its journal an article on the recent situation of the ‘mountain peasants’ in former Austria. The study focused on the decline of the prices of agricultural products from the 1930s onwards.

- In 1940, Ludwig Löhr, probably the most influential Austrian agronomist at the time, published an article on the problem of rural exodus in the Austrian provinces. He drew on the results of a survey commissioned by the provincial Ministry of Agriculture in Vienna concerning the lack of rural workforce.

- In 1941, a comprehensive monograph by Walter Lechler on the financial situation of farms in different agricultural regions of former Austria was published. The study commissioned by the Reich Ministry of Food and Agriculture provided a comparative assessment of the extent to which farms were over-indebted.
Let us take a closer look on these studies. The Vienna Institute of Economic Research focused on the relative prices of agricultural products. [CLICK] This graph shows the price development of typical products of mountain farming in the 1930s. Initially, the prices for milk, cattle, pigs and timber declined strongly and afterwards stagnated (except for timber). [CLICK] In contrast, the prices for wine, wheat, barley and rye recovered quickly by the mid-1930s. [CLICK] As a consequence, mountain farming (thick line) faced a more dramatic decline of product prices than arable farming (thin line). [CLICK] This socio-economic differentiation was mainly confined to German annexed Austria; in the rest of the German Reich this problem disappeared by 1938 (though at a relatively low level).
Ludwig Löhr’s study on rural exodus in selected communes in the province of Donauland in the year after Austria’s annexion to the German Reich reveals the dimension of the lack of rural workforce. Within twelve months nearly one quarter of non-family labourers quit the service. Even one tenth of the farm holder’s sons and daughters left their parental home. The study states that rural exodus was more dramatic in some mountainous regions than elsewhere.

<table>
<thead>
<tr>
<th>farm labourer categories</th>
<th>number of persons</th>
<th>Index (1938=100)</th>
</tr>
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<tbody>
<tr>
<td>family members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- farm holder couple</td>
<td>3089</td>
<td>3115</td>
</tr>
<tr>
<td>- children over 14 years</td>
<td>3262</td>
<td>2936</td>
</tr>
<tr>
<td>- children under 14 years</td>
<td>1546</td>
<td>1624</td>
</tr>
<tr>
<td>total family members</td>
<td>7877</td>
<td>7675</td>
</tr>
<tr>
<td>non-family labourers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- professional workers</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>- coachmen</td>
<td>559</td>
<td>411</td>
</tr>
<tr>
<td>- milkers</td>
<td>229</td>
<td>187</td>
</tr>
<tr>
<td>- other personnel for livestock care</td>
<td>163</td>
<td>130</td>
</tr>
<tr>
<td>- servants</td>
<td>1581</td>
<td>1250</td>
</tr>
<tr>
<td>- support personnel</td>
<td>152</td>
<td>113</td>
</tr>
<tr>
<td>total non-family labourers</td>
<td>2725</td>
<td>2134</td>
</tr>
</tbody>
</table>

Source: Löhr 1940, pp. 103 ff.
Walter Lechler’s study on the financial situation of farms in different agricultural regions of former Austria reveals the relative disadvantage of mountain farming: [CLICK] Compared to the standard farm value farm holders in the high mountains were more dramatically over-indebted than their colleagues in other regions. In the province of Alpenland the proportion of debts even exceeded the standard farm value on average.
What these studies reveal are selected aspects of a more comprehensive problem which I propose to term the 'mountain peasant syndrome'. It can be outlined as a vicious circle of four sub-problems:

- the gap between factor and product prices which caused farm and family incomes to fall;
- [CLICK] the over-indebtedness of farms, encompassing both 'external' (i.e. monetary) and 'internal' (i.e. infrastructural) losses of resources, which worsened the standard of living of the peasant households;
- [CLICK] the escalation of the drudgery of work as a reaction to the falling income, leading to familial 'self-exploitation' as well as exploitation of non-familial farmhands;
- [CLICK] the massive exodus of rural servants and even peasants' offspring in search for better living conditions in the booming industrial and public service sectors, causing a strong increase in agricultural wages, above all in mountainous areas, and, thus, opening the price gap.

It is important to note that the 'mountain peasant syndrome' was constructed at two levels: At the socio-economic level, it was constructed as a relationship of prices, debt rates, subsistence levels, migrations and so on. At the discursive level, it was constructed as a relationship of symbols which put forth the pathological nature of the problem. It was the very interaction of the socio-economic and discursive levels which made up the 'mountain peasant syndrome'.
This leads me to the second phase of rural planning for mountainous areas in Nazi Germany, namely organisation building. Probably the most prominent spokesman of the ‘mountain peasant syndrome’ was Anton Reinthaller [CLICK] who became Minister of Agriculture for German anexed Austria and Provincial Peasant Leader of Donauland in 1938 due to his merits for the Austrian Nazi movement. He and his staff acted as a lobbyists for the Austrian ‘montain peasantry’ not only in the public sphere via speeches and press articles, but also behind the scenes by addressing a series of petitions for state support to decision-makers of Nazi agricultural policy. However, his engagement for the ‘mountain peasantry’ was partly due to his self-interest: His function as the Minister of Agriculture was limited to the phase of Austria’s unification with the German Reich which came to an end in 1940. Therfore, the foundation of a federal single-purpose agency for the ‘mountain peasantry’ under his direction whole have prevented a slump in his career. In fact, a Department for Mountainous Areas as a sub-unit of the Reich Ministry of Food and Agriculture under Reinthaller’s direction was established in 1940.
The prime project of the newly founded agency was an action called 'communal construction in the mountainous area'. This project took shape in the context of a debate on the 'mountain peasantry' in the agricultural apparatus of the German Reich: The existence of fairly unprofitable 'mountain peasant' farms was contested between those who argued for the de-settlement of the high mountain population and those who argued for strengthening the 'mountain peasantry'. Anton Reinthaller supported the latter against the former position; thus he put forth a two-fold argument for the technical modernisation of mountain farming:

- At the economic level, the lack of dairy and meat products, labelled 'fat gap' (Fettlücke), as well as the lack of workforce called for technical innovation.
- At the ideological level, the 'peasantry', above all the 'mountain peasants', were regarded as a 'source of life of the Nordic race'; thus, working and living conditions ought to be improved.

Reinthaller's initiative coincided with the project for the overall technical modernisation of German agriculture labelled 'armament of the village'. Due to war priorities, this project was postponed to the time after the 'final victory'. However, a number of local pilot tests of technical modernisation labelled 'communal construction' should be implemented in mountainous areas. In short, 'small steps' were considered to prepare the 'great leap'.
On this relief map of the southern part of the German Reich we can see the distribution of the 'communal construction' projects by agricultural provinces in 1943. Most of the 69 projects were implemented in the Alpine and Sub-Alpine area; only a few were located elsewhere. I am going to focus on the province of Donauland where I have explored one case of 'communal construction' in detail.
Let us zoom in on this region. Donauland encompassed the provinces of Vienna, Nieder- and Oberdonau. This map depicts the agricultural production zones. The grey coloured area indicate the Alpine and Sub-Alpine region. My following remarks relate to the case of Ybbsitz, one of the 19 projects of 'communal construction' in the province of Donauland.
Before going into detail, this scheme gives you an overview of the organisation of 'communal construction'.

- At the Reich level, the Ministry of Food and Agriculture in personal union with the Reich Peasant Leader decided on the action's goals and the means to this end. Within the ministry, the Department of Mountainous Areas directed by Anton Reinthaller co-ordinated the action.

- At the provincial level, the Reich Food Estate was responsible for the concrete planning. The application of these plans was assigned to the Reich Governor of Niederdonau.

- At the local level, an 'association for construction' was founded in Ybbsitz. Its task area included the domains of conduct of people, agricultural technology and farm economy.

- At the farm level, 202 farm holders formed the basis of the association.

What is striking is the combination of state organisation at the supra-local levels and self-organisation at the local and farm levels or, to be more precise, state organisation by self-organisation. This institutional linkage of top-down and bottom-up decision-making was suited to gain trust in the overall apparatus.
Now we come to the third phase of the 'communal construction' action, namely project planning. Before the planners of the Reich Food Estate started to quantify the measures, they undertook a both quantitative and qualitative assessment of the working and living conditions of the peasants of Ybbsitz. Like ethnographers, they observed and interviewed the local population. A selection of results indicate the broad spectrum of features investigated:

- the competence of the farm holders (4 % were regarded as not competent, 16 % as less competent, 80 % as competent);
- the 'racial' quality of the population ('not very strong, but healthy and fresh');
- the number of newspapers read and radios used;
- the application of mineral fertilizer ('few and onesided');
- the methods of cultivation ('backward');
- leisure activities (e.g. tavern visiting by men);
- the table manners (e.g. eating from a common large bowl);
- the diet (e.g. lack of vegetables);
- the economic ethic ('industrious' and 'modest');
Let us take a glance on the cost estimate. More than the half of the costs of 14 millions of Reichsmark was devoted to farm buildings. One further quarter concerned road building and machinery. The rest was allotted to the distribution of forest land, domestic economy, forestry, electrical and telephone connections, drainage, new settlement, mineral fertilizer, enclosures, hydraulic engineering and other measures.
Only a small percentage of the total costs were to be borne by the members of the local association; more than nine tenths should be funded by state agencies. The financial scheme envisaged a five year period from 1941 to 1946 for project implementation with rising annual expenses.
The five year duration of the project encompassed four stages:
- Stage 1 consisted of immediate measures (road building, electric power supply, extension etc.);
- Stage 2 aimed at farm improvement based on network diffusion (mineral fertilizer, silage, machinery etc.);
- Stage 3 concerned the common infrastructure (workshop, shed for machines, health post etc.);
- Stage 4 included the finalisation of the project (distribution of forest, farm control, settlement of accounts etc.).

A stringent logic seems to have laid behind this time schedule: first, the opening up of farms and households for upstream and downstream resource flows; second, the diffusion of innovations from selected pioneer-farmers to their neighbours; third, the interlingage of single farms by the common infrastructure.
How would these measures have affected the local farming systems? This figure depicts the actual state of the agrosystem of an average farm in Ybbsitz in 1941. Each square represents one sort of resources: the lower left square stands for the cultivated land, the upper left square for the livestock, the upper right square for the labour force and the lower right square for the machinery. The red arrows illustrate the directions and amounts of money flows. The question about the impact of the 'communal construction' on the local farming system can be answered by comparison with the target state of 1946 according to the planning documents. I will stress only the most remarkable elements:

- First, whereas land and labour force hardly increased, the livestock doubled – mostly due to the expansion of dairy cows – and the machinery quintupled.

- Second, though farm size nearly stagnated in absolute terms, the relations between different uses of land changed considerably: Arable land increased at the expense of grassland; moreover, pastures were converted into meadows. As a result, land was used more intensively afterwards than before.

- Third, farm inputs such as mineral fertilizer, seeds and fossil fuels strongly increased; so did farm outputs such as dairy products and meat. Consequently, circular flows of resources were more and more redirected to factor and product markets.

- Fourth, according to the calculations, formerly unprofitable farms were expected to make profits in the end. Thus, the farm as a target of labour assignment was transformed into a source of monetary income.
The target state of 1946 outlined before was calculated as a weighted mean of two model farms described in detail in the planning documents: a medium and a large farm. The main differences related to the following features:

- the size of farmland, livestock and machinery;
- the number of non-familial labourers;
- the potential annual profit.
As laid out in the cost estimate, farmhouse construction was of utmost importance in the 'communal construction' action. Here you can see a building plan of a so-called 'domestic type of farmhouse'. Which elements were in fact 'domestic' – and which were not – can be seen by comparison with one region-typical farmhouse in Ybbsitz from the seventeenth century; according to the footprint of the building, this is called a 'Double-T-Farm':

- Whereas in the region-typical farmhouse the housing unit was located in one wing of the building, in the plan of 1941 it was located in the middle.
- Furthermore, in the region-typical farmhouse the 'parlour' (Stube) combined the functions of cooking, eating and communicating. In contrast, the plan of 1941 separated kitchen and living room from each other.
- Another difference worth mentioning is the orthogonal footprint in the plan of 1941, while the walls of the region-typical farmhouse were fairly skew.

These differences point to notions of tradition and modernity inscribed in farmhouse construction: While the form of the farmhouse seemed to be traditional, the content included modern elements. Therefore, the 'domestic type of farmhouse' as planned in 1941 can be interpreted as an 'invented tradition' inspired by modernist visions of rural housing.
Which measures of the plans were actually realised? The answer to this question leads me to the fourth phase of the 'communal construction' action, namely project implementation and evaluation. According to the detailed reports by the local coordinator, we get an impression of the state of project implementation at the end of 1942. In the domain 'conduct of people' the balance was as follows:

[see slide]
Balance end of 1942: technology

• start of two road construction projects (officially cancelled)
• completion of 41 electrical connections
• construction of two cablecars (one completed, one started)
• planning of two drainage projects
• planning of two water supply projects
### Balance end of 1942: farm economy

- crop experiments, soil and livestock examination
- application of 2000 tons mineral fertilizer
- application of 4 tons high-yielding varieties
- increase of crop area of potatoes
- cultivation of catch crops (mustard)
- propaganda for silage
- foundation of a bull breeding association
- delivery of a few thousand fruit trees
- delivery of 177 agricultural machines
- domestic economy (use of vegetables, education in child care, canning of meat)

[see slide]
Compared to the planners’ visions, the real outcome of the ‘communal construction’ project in Ybbsitz was a modest affair. This was due to both external and internal defects of regulation:

- the lack of workforce and material (e.g. the termination of road construction by the Nazi regime in 1942);
- the contradiction between efficiency and surveillance goals (e.g. the assignment of Soviet POWs);
- the lack of coordination within the local ‘association for construction’ (e.g. the lack of a local coordinator);
- rural unrest against specific measures (e.g. resistance against medical examinations of peasant families in the context of ‘racial research’).
Finally, I would like to conclude by comparing the ideal type of 'high modernism' as laid out by James Scott with the real type of 'ambivalent modernism' as explored in my case study. On the one hand, the main elements were quite similar: the legibility of the society, the ideology of 'high modernism', the authoritarian nation-state and the incapacitated civil society. On the other hand, we can observe several differences:

- According to the ideal, 'high modernism' aims at the 'great leap forward'; in reality, the 'communal construction' action was considered to prepare the 'great leap' of overall technical modernisation by 'small steps' in selected locations.

- According to James Scott, 'high modernism' cuts off the past from the present in order to focus on the future; as exemplified by farmhouse planning in Ybbsitz, the past and the future were interlinked in order to represent modernity as an 'invented tradition'.

- Whereas 'high modernism' in the strict sense means the total neglect of everyday customs of the population, in my case the customary ways of working and living of rural people were surveyed as a starting point for further planning.

- Informal networks such as kinship or neighbourhood were neither destroyed, nor ignored as one would expect according to the ideal of 'high modernism'; in reality they were rather considered a means for the diffusion of innovations from one farm to another.

- Forms of everyday resistance of the farming community against the planned measures (e.g. medical examinations) were not completely suppressed, but accepted to a certain degree.

- Finally, self-regulation was not abandoned, but considered an instrument of state regulation as exemplified by the local 'association for construction'.

<table>
<thead>
<tr>
<th>'high modernism' (ideal type)</th>
<th>'ambivalent modernism' (real type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• great leap</td>
<td>• 'small steps'</td>
</tr>
<tr>
<td>• cutting off of the past</td>
<td>• modernity as 'invented tradition'</td>
</tr>
<tr>
<td>• neglect of everyday customs</td>
<td>• everyday customs as starting point of planning</td>
</tr>
<tr>
<td>• destruction of informal networks</td>
<td>• diffusion of innovations via informal networks</td>
</tr>
<tr>
<td>• total suppression of resistance</td>
<td>• acceptance of resistance (to a certain degree)</td>
</tr>
<tr>
<td>• replacement of self-regulation by state regulation</td>
<td>• self-regulation as an instrument of state regulation</td>
</tr>
</tbody>
</table>
Despite some similarities, the case of 'communal construction' in mountainous areas in Nazi Germany differs from 'high modernism' as outlined by James Scott. The power of the totalitarian state was not as 'total' as suggested; however, Nazi rural planning to some extent strived towards the farming population's trust. All in all, I would argue that the 'communal construction' action was part of an ambivalent modernisation leading to the temporal and spatial restructuring of peasant mountain farming according to the 'productivist megaproject'. The 'productivist megaproject' positioned at the future and state levels became the vanishing point of agricultural regulation.

Regarding the temporal dimension, the present was increasingly subordinated to the future, while the past lost much of its relevance and was represented as an 'invented tradition'. Regarding the spatial dimension, regulation at local and regional levels was more and more subordinated to corporatist state regulation. Guidance by the 'megaproject' was not total, but (at least partially) based on trust in science-based knowledge. As a consequence, local and regional projects of farming were integrated into an overall agrosystem, a kind of 'national farm' guided by agronomic experts. The 'megaproject' guiding the 'communal construction' action was intensified, specialised and commercialised dairy farming. Though this vision was not fully realised before 1945, it attracted the views of agricultural decision-makers, agronomists, teachers, extension staff and farm holders after 1945. Thus, the 'communal construction' action can be regarded as one decisive step further along the path to postwar 'productivism' in Alpine areas.