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# Varieties of Modernity

**Fascism and Agricultural Development in  
Austria, 1934–1945**

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## **Varieties of Modernity: Fascism and Agricultural Development in Austria, 1934–1945**

Abstract: This article challenges the view of the agricultural policies of the ‘Austrofascist’ and Nazi regimes in Austria to be essentially ‘anti-modern’. Whereas the agricultural policy of the Austrian ‘Corporate State’ (*Ständestaat*) followed the legacy of ‘conservative modernisation’ since the late nineteenth century, the German Reich enforced agro-modernisation, as is shown with regard to market linkage, state regulation and farming styles. Though Nazi decision-makers intended to modernise Austrian agriculture which they considered to lag behind the German average level, their projects of agro-modernisation took effect only partially. While technical change vastly got deadlocked in the bottlenecks of ‘total warfare’, the institutional matrix changed fundamentally. Whereas no ‘great leap’ of agro-modernisation was achieved, Austria’s agricultural development from the mid-1930s to the mid-1940s made an irreversible step along the pathway to the productivist food regime.

### **I. Introduction**

With regard to agricultural development in twentieth-century Austria, the ‘Austrofascist’ era 1934 to 1938 as well as the Nazi era 1938 to 1945 have long been conceived an ‘interlude’ or even a ‘step backwards’ by post-war historiography. Most writers assessed fascist agricultural policies as being essentially ‘anti-modern’: some emphasised the authoritarian and totalitarian character of the regulation of agriculture by the ‘Austrofascist’ and Nazi dictatorships, doing away with the democratic institutions of the Austrian First Republic; others pointed at the overreaching agrarian fundamentalism as expressed by the ‘Austrofascist’ glorification of the peasantry as well as the Nazi ‘blood and soil’ (*Blut und Boden*) ideology, aiming at the restoration of a seemingly pre-industrial ‘peasant community’. Both lines of argumentation led to the conclusion that Austrian agricultural development 1934 to 1945 stagnated or even declined due to more extensive uses of land and livestock, sometimes even interpreted as an outcome of peasant resistance against Nazi rule (Tremel 1969: 390 f.; Mooslechner & Stadler 1988). Accordingly, the transition to ‘modern’ – i.e. capital-intensive – agriculture took off not until the 1950s, after the ‘reconstruction era’ of the Austrian Second Republic.

Before questioning the view of the ‘anti-modern’ nature of agricultural policies in Austria from the mid-1930s to the mid-1940s, the main features of the two political regimes in this period shall be outlined. The Republic of Austria, founded in 1918 as one of the successor states of the Habsburg Monarchy, got into trouble due to economic and political crises in the late 1920s and early 1930s. After the dissolution of the parliament, the prohibition of the Communist and Nazi parties and the defeat of the Social Democrats in the civil war 1933/34, the catholic-conservative government proclaimed an authoritarian Christian and German state based on corporations – a ‘Corporate State’ (*Ständestaat*). The parliament was replaced by six councils with nominated membership. All political parties were forbidden except for the Fatherland Front (*Vaterländische Front*), a – widely failed – attempt to impose a fascist mass movement similar to Italy and Germany. Seven ‘Professional Estates’ (*Berufsstände*), encompassing both employers and employees, were envisaged; only two – agriculture and the public service – were actually founded (Tálos & Neugebauer 2005; Peniston-Bird 2009). The debate on the ‘fascist’ character of this both anti-liberal and anti-socialist dictatorship lacking imperialist or racist radicalism is still ongoing; however, its intermediate position between the fascist prototypes, Italian Fascism and National Socialism, and other authoritarian regimes of the 1930s suggests the labels ‘parafascist’ (Griffin 1993: 240) or ‘Austrofascist’ (Tálos 2005: 417). The ‘Corporate State’, initially supported by Italian Fascism, came to an end in 1938 when National Socialism gained power in Austria both from within, by anti-government demonstrations of the Nazi party, and outside, by the invasion of the German Army. After a referendum, Austria as a whole was annexed to the German Reich and sub-divided into seven provinces (*Reichsgaue*) of general and party administration. In several respects, the Austrian provinces of the German Reich provided an experimental ground for the regime’s actions (e.g. the persecution of Jewish citizens). After the military defeat of Nazi Germany in 1945, Austria was restored as a democratic republic under Allied occupation, before re-gaining full sovereignty in 1955 (Tálos et al. 2000). Despite some ‘exceptionalist’ notions, there is broad consensus that National Socialism with its key features – imperialism, racism, totalitarianism etc. – conforms to a generic definition of fascism (Kallis 2003; Bosworth 2009). Therefore, I refer to the two political regimes in Austria between 1934 and 1945 as ‘fascist’, without denying their fundamental or gradual differences.

This article challenges the view of the agricultural policies of the ‘Austrofascist’ and Nazi regimes in Austria to be essentially ‘anti-modern’. I would not deny the anti-democratic and

agrarianist tendencies of the ‘Austrofascist’ and Nazi regimes at all; but what needs to be challenged, is the conclusion about their ‘anti-modern’ nature. Much of the confusion about the ‘(anti-)modern’ character of fascism derives from the vagueness of the term ‘modernity’. Neither the social sciences in general nor history in particular have developed a coherent theory of modernisation; what we have is a bundle of (non- or even anti-Marxian) assumptions about societal change diffusely called ‘modernisation’. Similar to orthodox Marxian approaches, the classical view of ‘modernisation’, focused on the one-way street of democratisation and industrialisation, has been re-interpreted in the context of the criticism of modernity since the 1960s and the affirmation of post-modernity since the 1980s (Knöbl 2003). According to Shmuel N. Eisenstadt’s (2002) ‘multiple modernities’, for instance, modernisation inherits a particular *ambivalence*, allowing more than one pathway of societal transformation: besides the ‘normal’ (i.e. West European) route to liberal-democratic society, alternative ways of modernisation – including socialist and fascist ones (Moore 1966) – become thinkable. Whereas the classical notion of ‘modernity’ excludes fascism by definition, more reflexive notions facilitate an accurate assessment of the ‘(anti-)modern’ character of fascist regimes in general and their agricultural policies in particular (Bavaj 2003, 2005).

According to the ambivalence of modernity, the relationship of fascism and modernity has recently been reassessed, among others, by Roger Griffin: ‘What fascism does viscerally oppose is not modernity as such, but those elements within modernity that it considers to be fuelling national decay and the erosion of that sense of a higher purpose to existence that fascism associates with membership in an organic community.’ (Griffin 2006: 9, 2007) Therefore, the crucial problem is not if, but *how* society was modernised in a certain temporal and spatial context, thereby overcoming the sharp antagonism between ‘the tradition’ and ‘the modernity’. With regard to the debate on Nazism and modernity from the 1960s onwards (Bavaj 2003: 13-56), these varieties of modernity can be ordered along two dimensions: first, the *position of decision-makers*, i.e. whether the modernisation of society was intended or an unintended function; second, the *range of modernisation*, i.e. whether it affected society partially or totally. This two-dimensional order makes four ideal-typical positions which can be exemplified by positions taken by scholars in the last five decades (see Table 1). In the 1960s, David Schoenbaum (1966) was one of the first emphasising the ‘modern’ character of Nazism; however, this ‘social revolution’ took place against the ‘anti-modernist’ intentions of the Nazi leaders. In the 1970s and 1980s, Hans Mommsen (1991), who wrote the afterword for the German edition of Schoenbaum’s book (Mommsen 1980), conceded a few modern

developments in the Nazi era; but he classified them either as unintended consequences of the Nazi rule or as ‚pretended modernisation‘. In the late-1980s, Rainer Zitelmann (1989) caused a stir by claiming that Hitler and other Nazi leaders were ‚revolutionaries‘ in the sense that they aimed at fundamentally transforming German society according to modernist visions. In the 1990s, Riccardo Bavaj (2003, 199-204) in his assessment of the whole debate argued that, though many Nazi leaders followed modernist visions, their efforts affected only parts of the society. I do not want to enter this debate by judging who is ‚right‘ or ‚wrong‘; however, use it as a heuristic framework for the assessment of agricultural development in Austria from the mid-1930s to the mid-1940s.

**Table 1: Varieties of modernity with regard to Nazism**

		position of decision-makers	
		intentional	functional
range of modernisation	total	modernisation as a ‚great leap‘ (e.g. Zitelmann)	unintended ‚revolution‘ (e.g. Schoenbaum)
	partial	modernisation in ‚small steps‘ (e.g. Bavaj)	unintended effects of policy (e.g. Mommsen)

If we relate this heuristic framework to agricultural development, we shall take as a point of reference the ‘great transformation’ of Austrian agriculture in the twentieth century, i.e. the transition from a capital-extensive to a capital-intensive (‘productivist’) food regime (Friedmann & McMichael 1989; Ilbery & Bowler 1998). Food regimes are made-up by institutionalised interrelations between a particular mode of *accumulation* of resources and a particular mode of *regulation* by societal actors along the agro-food chain (McMichael 2009). Accordingly, the focus of this article is twofold: the development of agricultural resource flows into, within and out of the agrosystem in the one hand; the development of agricultural regulation at different levels (including farming styles as ‘modes of ordering’ of local and regional agrosystems) on the other hand (van der Ploeg 2003; Vanclay et al. 2006). To put it very roughly, the capital-extensive agrosystem in Austria after the dissolution of the regional division of labour in the Habsburg Monarchy in 1918 involved, first, relatively low capital inputs and low outputs with high internal conversion of resources (e.g. nutrient cycles between fodder production and organic fertilisation); second, a high degree of self-regulation at the local and regional levels (e.g. via peasant cooperatives) prior to the state intervention of the 1930s as a reaction to the ‘Great Depression’; and, third, the dominance of peasant styles

of farming maintaining the relative autonomy of the family economy vis-à-vis subordination to state and markets (Bruckmüller et al. 2002, 2003).

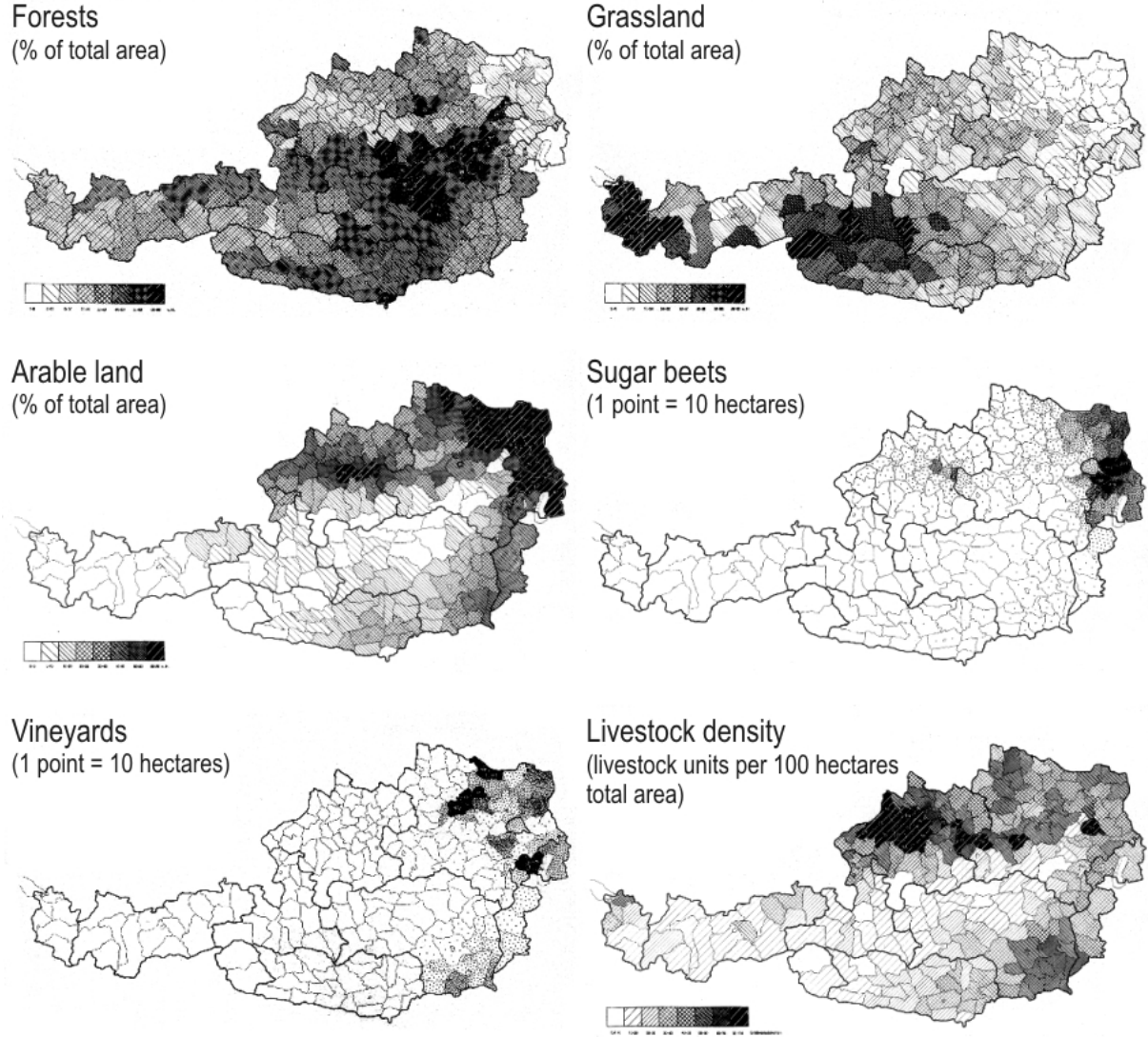
The ‘productivist transition’ by the 1980s involved, first, high inputs (mainly chemical and mechanical technology financed by public and private credits) and high outputs (to a large degree raw materials for the processing industries) with decreased internal conversion; second, the widening and deepening of interventionist agricultural policies according to the vision of the productive family farm as codified in the 1960 Agriculture Act; and, third, the emergence of entrepreneurial styles of farming with a strong masculine bias, hand in hand with the ‘feminisation’ of the domestic sphere (Bruckmüller et al. 2002, 2003). With regard to this secular trend, the main question this article aims at answering arises: which impact did the two fascist regimes have on the transition from the capital-extensive to the capital-intensive food regime in Austria? In the following sections this question is being answered with regard to resource flows from and to markets, state regulation and everyday styles of farming. Due to principal and pragmatic reasons, the emphasis is on the Nazi era on which I have recently undertaken source-based case studies (Langthaler 2000, 2009), whereas the ‘Austrofascist’ era is outlined on the basis of the available literature. Most of the following exploration refers to the province of Lower Austria (*Niederösterreich*) or Niederdonau, the rural hinterland of the city of Vienna.

## **II. Agricultural development in the ‘Austrofascist’ era, 1934–1938**

Any consideration of agricultural development at the (supra-)national level must take into account the features of regional and local agrosystems, especially in a country as diverse as Austria. According to the 1930 agricultural census and its cartographic representation (Wutz 1939), the Austrian main landscapes – the Alpine area, the northern highlands and the flat and hilly land – can be compared with regard to farm size, land use, labour and capital endowments (Figure 1). The Alpine area was characterised by holdings larger than 20 hectares with an emphasis on forestry and grassland farming; in addition to large peasant farms, a considerable amount of large forest estates was registered. Due to the importance of dairy cattle, permanent labourers prevailed among the non-family workforce. In the northern highlands medium-sized and large peasant farms between 10 and 100 hectares were above average. Regarding land and livestock use, forestry and arable farming as well as intensive

livestock breeding – and, thus, permanent non-family labourers – came to the fore. The flat and hilly land in-between and at the margins of the Alps and the highlands sub-divides into two areas: The eastern part around the consumer centre of the highly industrialised Vienna basin was characterised by the unequal distribution of land between smallholdings and small peasant farms on the one hand and large estates on the other hand. Despite the considerable use of livestock and due to the emphasis on intensive arable farming and viticulture, occasional non-family labourers in combination with machinery were above average. In the western part of the flat and hilly land the combination of grassland and arable farming by medium-sized and large peasant farms, characterised by intensive livestock breeding with permanent servants, was accentuated. Austria’s agrosystemic diversity posed a serious challenge to any kind of agricultural policy, be it fascist or non-fascist.

**Figure 1: Regional patterns of land and livestock use in Austria, 1930**



Source: Wutz 1939.



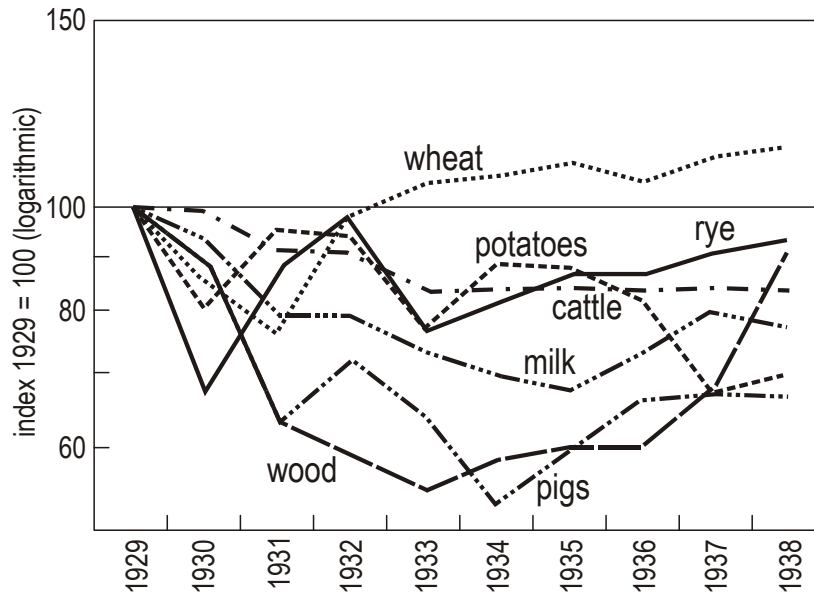
In addition to the agrosystemic conditions, agricultural development in the ‘Austrofascist’ era also depended on Austria’s path of coping with the economic and political crisis of the early 1930s. Due to massive production increases in overseas regions (USA, Canada, Argentina etc.), grain prices on the world market decreased from the late 1920s onwards; furthermore, the prices of most other agricultural products began to fall. Since Austria heavily depended on grain imports and the emphasis of its domestic production was on dairy and meat products, the agricultural sector was hit by the price decline rather late, but seriously. The agrarian apparatus under the catholic-conservative Minister Engelbert Dollfuß reacted to the agricultural crisis by proclaiming an ‘agrarian course’ (*agrarischer Kurs*) in 1931, encompassing protection against foreign production as well as restrictions of domestic dairy, meat and grain production. These regulations aimed at boosting agricultural producer prices – at the expense of consumers dependent on food purchase. This producer-oriented strategy reflected the polarisation between the ruling Christian Social Party and their coalition partners on the one hand and the Social Democratic Party on the other hand, culminating in the stepwise installation of the authoritarian regime in 1933/34 under Chancellor Engelbert Dollfuß, formerly Minister of Agriculture and Forestry (Kluge 1988; Miller 1989; Bruckmüller 1995; Hanisch 2005). In a famous speech in 1933, he metaphorically equalled the corporative order of the ‘new state’ with the paternalistic order of the traditional ‘peasant house’, where farm holder and servant together spoon up their soup out of a large bowl (Senft 2005: 114). Thus, the ‘agrarian course’ was deeply rooted in the social as well as discursive polarisation of Austrian society in the shadow of ‘Great Depression’ and emerging ‘Austrofascism’.

According to the constitution of the ‘Corporate State’, the ‘Professional Estate Agriculture and Forestry’ was established in 1935. The idea of a corporative organisation of farm holders and their labourers was already discussed, among others, by Engelbert Dollfuß in the 1920s, but not realised yet due to social-democratic resistance; the authoritarian regime removed this hindrance. The agrarian ‘Professional Estate’ was a self-governing corporation in the service of the state. Rather than establishing new organisations, it incorporated existing ones, as was the case in Lower Austria: the Peasant League (*Bauernbund*), founded in 1906 as a sub-division of the Christian Social Party, as the ‘sole ruler’ and the Agricultural Chamber (*Landwirtschaftskammer*), founded in 1922 as the official farmers’ organisation, as an expert

apparatus. Thereby, the informal linkage of catholic-conservative politics and professional representation since the 1920s was formally confirmed (Langthaler 2008: 695-698).

In contrast to the ideology-driven re-organisation of the agrarian apparatus, agricultural policy after Engelbert Dollfuß' homicide by Nazi rebels in 1934 followed a rather pragmatic course. The far-reaching demands of agrarian functionaries – closing the 'price scissors' between input and output prices, increasing demand for dairy and meat products, reducing tax burden and social charges, decreasing interest rates of credits, preventing forced auctions of farmsteads etc. –, provoked harsh protest by industrial pressure groups and were rarely fulfilled by the government under Chancellor Kurt von Schuschnigg. Contrary to the corporatist ideal of mutual co-operation, in reality the competition between different factions of the farming community became obvious, therefore de-legitimising the agrarian apparatus step by step (Mattl 1993). The market regulation established according to the 'agrarian course' with fixed delivery quotas served the interests of larger farm enterprises rather than small and medium-sized peasant holdings. Furthermore, the divergence of food prices in the 1930s favoured arable farming over livestock farming and forestry (Figure 2). The massive price divergence reveals the agricultural crisis to be an outcome of under-consumption rather than over-production: Due to the monetarist budget policy of the 'Corporate State', the purchasing power of the urban population hit by mass unemployment remained weak, therefore shifting food consumption from relatively expensive dairy products and meat to cheaper grain and potatoes. The social and regional differentiation of agricultural incomes led to increasing indebtedness and, therefore, a wave of forced auctions of farm holdings, especially in small-scaled and mountainous regions. Counter-measures such as the Mountain Peasant Aid Fund (*Bergbauernhilfsfonds*) in 1934 were unapt to solve the debt problem. All in all, the agricultural policy of the 'Austrofascist' regime did not affect the diverse agrosystems equally; the 'agrarian course' was biased towards large-scale farm enterprises in favoured areas such as the technologically advanced wheat and sugar beet farmers in the Danube basin, who provided the most important reservoir of agrarian top-level functionaries (Kluge 1988; Senft 2002, 2005).

**Figure 2: Agricultural producer prices in Austria, 1929–1938**



Source: Wiener Institut für Wirtschafts- und Konjunkturforschung 1939, 207.

### **III. Agricultural development in the Nazi era, 1938–1945**

#### **1. Market linkage**

Despite the romantic images of pre-industrial agriculture inscribed in the ‘blood and soil’ ideology (Lovin 1967), the Nazi regime did not refuse modern technology (Herf 1984). Indeed, the food regime established by the Nazi government in Germany since 1933 fostered technological progress. Conventional historiography of agricultural development in Nazi Germany is focused on the preparation of the war of aggression (Farquharson 1976; Corni 1990; Corni & Gies 1997). However, this view seems to be too narrow; from a broader perspective, it becomes evident that leading decision-makers in the agrarian apparatus of the ‘Third Reich’ aimed at fundamentally reordering the interwar food regime at a European level (Tooze 2006: 166-199). After the disruptions of agricultural trade in the First World War, the prewar global food regime under British hegemony, based on the delivery of agricultural products from overseas white settler colonies to European industrial states, had been restored (Friedmann & McMichael 1989). From the 1920s onwards, Germany had become highly dependent on food imports, especially feeding stuffs used for livestock farming (Grant 2009; Corni & Gies 2007: 371-392). According to the agrarian top-level functionary Herbert Backe, who by and by disempowered his chief Richard W. Darré, the Minister of Food and Agriculture and Reich Peasant Leader, from 1936 onwards, the order of a ‘world economy’

(*Weltwirtschaft*) under British rule was to be replaced by the order of a European ‘greater area economy’ (*Großraumwirtschaft*) under German hegemony (Backe 1942). The project of economic reordering at the European level by the German Reich was interconnected with the project of political reordering by diplomatic and military means; both amalgamated into the political-economic ‘megaproject’ of the Nazi food regime. Though this vision diverged from reality, it guided the thoughts and actions of decision-makers, scientific experts and functionaries in the agrarian apparatus of the ‘Third Reich’ (Becker 1987; Heim 2003; Oberkrome 2009: 90-232).

According to the ‘greater area economy’, the German Reich aimed at reorienting its agro-food commodity chains from the world market towards bilateral trade relations, especially with confederate states in Southeast Europe, on the one hand and domestic production on the other hand (Corni & Gies 1997: 371-392). From 1934 onwards, a state-led production campaign, labelled ‘battle for production’ (*Erzeugungsschlacht*), was annually announced (Lovin 1974). Though I would not claim that the ‘battle for production’ was lost (Degler & Streb 2008), the results were rather ambivalent, as is indicated by the degree of self-sufficiency rising only slightly from 80 percent in 1933/34 to 83 percent in 1938/39 (Volkmann 1979: 301). Since Hitler and many other Nazi leaders were in fear of food riots as experienced in the First World War (Kutz 1984; Corni & Gies 1997: 399-409), the crisis of the ‘battle for production’ at the eve of the Second World War was not only an economic, but also a supremely political issue. It culminated in a paradigmatic shift of the state-led production campaign in the minds of leading agrarian experts: In the 1930s, the emphasis of Nazi agricultural policy was on the improvement of *land productivity* due to the relative scarcity of agricultural land and the abundance of agricultural labour. During the war, the agronomic discourse shifted to the improvement of *labour productivity* due to the relative scarcity of agricultural labour (as a consequence of rural exodus and military service) and the abundance of agricultural land (as a consequence of the German territorial expansion in East and Southeast Europe) (Streb & Pyta 2005).

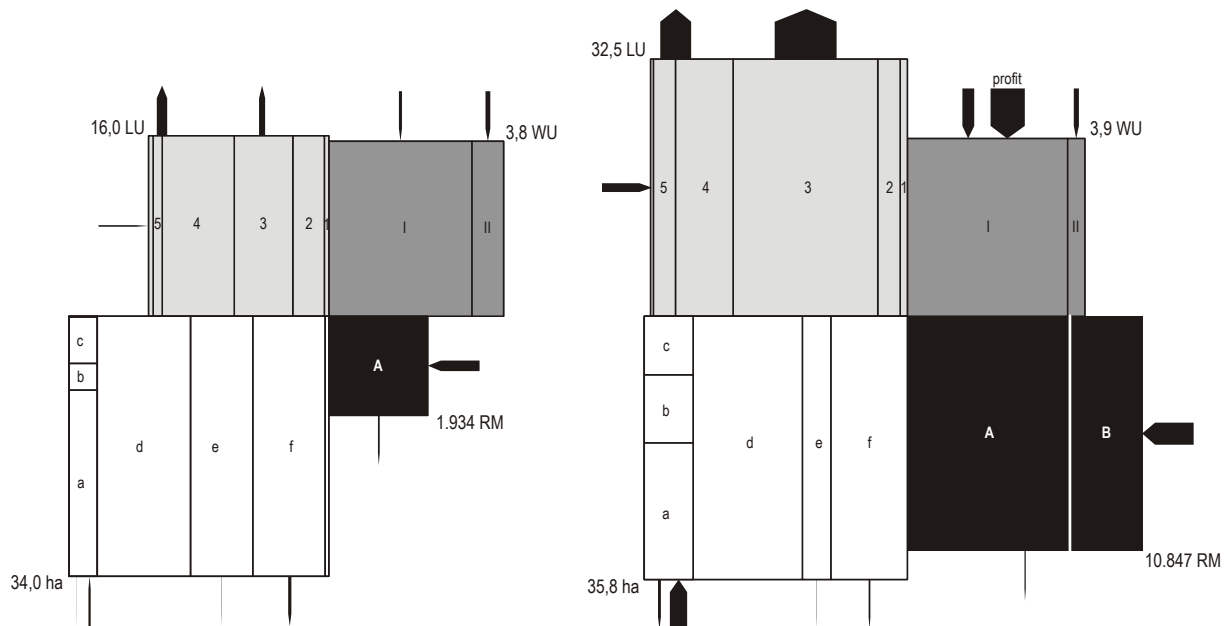
The paradigmatic shift from land to labour productivity called for mechanical compared to biological farm technology, for tractors compared to mineral fertilizers (Hayami & Ruttan 1985). However, due to the priorities of warfare, the project of the overall mechanisation of German agriculture – the so-called ‘armament of the village’ (*Aufrüstung des Dorfes*) – was postponed to the time after the ‘final victory’ (Corni & Gies 1997: 429). Despite the

bottlenecks of raw materials and labour-force, local pilot actions labelled ‚communal construction‘ (*Gemeinschaftsaufbau*) were implemented in mountainous areas as ‚small steps‘ preparing the ‚great leap‘. The ‚communal construction‘ plan for Ybbsitz, an Alpine commune in the South-West of Niederdonau, reveals the potential impact of the action on the local agrosystem. Figure 3 depicts the actual state of the average farming system in the commune of Ybbsitz in 1941 according to the investigations of the planners. 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 arrows illustrate the directions and amounts of money flows. The planned impact of the ‚communal construction‘ action on the local agrosystem becomes clear by comparison with the target state according to the plan five years later: 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 fossile fuels substantially 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.<sup>1</sup> Thus, the ‚communal construction‘ plan transformed the farm from a target of the assignment of family labour into a source of monetary income.

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<sup>1</sup> Österreichisches Staatsarchiv/Archiv der Republik, Reichsministerium für Ernährung und Landwirtschaft, Unterabteilung Bergland, box Gemeinschaftsaufbau Niederdonau, file Ybbsitz.

**Figure 3: Actual (left) and target state (right) of the average farming system in Ybbsitz according to the 1941 ‘communal construction’ plan**



Legend: □ = cultivated area (hectares), ■ = livestock (livestock units, 1 LU = 500 kilograms of live weight), ■ = labour force (working units, 1 WU = 300 working days per year), ■ = machinery (value as new in Reichsmark), ■ = money flows, a = grain, b = root crops, c = forage crops, d = meadows, e = pastures, f = forests, 1 = horses, 2 = oxen, 3 = cows, 4 = young cattle, 5 = pigs, I = family labourers, II = non-family labourers, A = individual property, B = collective property.

Source: calculation and design by the author according to Österreichisches Staatsarchiv/Archiv der Republik, Reichsministerium für Ernährung und Landwirtschaft, Unterabteilung Bergland, box Gemeinschaftsaufbau Niederdonau, file Ybbsitz.

Like elsewhere, in Ybbsitz the ‘communal construction’ action was only partly realised due to war-induced bottlenecks; however, the plans indicate the reordering of agrosystemic resource flows according to the visions of the agronomic experts of the Nazi food regime: all in all, the action aimed at transforming mountain agriculture areas towards high-input high-output farming, closely interlinked with upstream and downstream industries. Though the integration of arable and livestock farming was not challenged yet (as was the case two decades later), the emphasis on mechanised dairying indicates the vision of a more intensified, specialised and concentrated – in short, *productivist* – agrosystem. In this way, the ‘communal construction’ plans of the 1940s anticipated the path agricultural development took at the northern fringe of the Austrian Alps from the 1950s onwards (Langthaler 2003).

## 2. State regulation

The reordering of agrosystemic resource flows the agrarian apparatus in Nazi Germany attempted involved an unprecedented form of state regulation both in quantity and quality. Due to the corporatist structure of the Nazi agrarian apparatus, the key actor in this game,

besides the Ministry of Food and Agriculture, was a compulsory corporation encompassing producers, processors and traders of food products: the Reich Food Estate (*Reichsnährstand*). However, both organisations were led in personal union by Richard W. Darré (Corni & Gies 1997: 75-250). The Reich Food Estate as a hybrid of a peasants' interest group and a state agency aimed at regulating the agricultural sector like a 'national farm'; the means to this end was a 'total' form of agricultural statistics (Tooze 2001: 177-214). The conventional techniques of the collection and evaluation of agricultural data did not meet the challenge of 'total' statistics: the bookkeeping statistics included only a small sample of all farms. Even the agricultural census including the totality of farms did not suit the challenge of 'total' statistics due to its centralised and inflexible nature. The unconventional solution to this problem was a decentralised and flexible technique of data collection and evaluation: the *farm file* (*Hofkarte*). The differences between the agricultural census and farm file statistics were striking: *perennial* actualisation (e.g. 1933 and 1939) versus *annual* actualisation from 1937 onwards; *central* data collection and evaluation by the Federal Agency of Statistics versus *decentral* data collection and evaluation by the regional agencies of the Reich Food Estate; *aggregated* data for administrative units versus *farm-level* data; *small* versus *comprehensive* selection of farm features; *fixed* set of queries versus *flexible* queries (e.g. demand for commercial seeds by farm size and type of land use); *scientific* knowledge for basic and applied research versus *bureaucratic* knowledge for agricultural regulation (Fensch 1939). In short, farm file statistics combined the advantages of the bookkeeping statistics (i.e. the quality of farm data) and the agricultural census (i.e. the quantity of farm data).

The farm file was collected in close co-operation of the local representatives of the Reich Food Estate and the farmers themselves. One copy was stored at the regional agency of the Reich Food Estate; another copy was given to the farmers. In theory it should serve as a means for both state control and farmer's self-control. However, in practice the quest for control was contested by manipulation of data. The guiding principle was the metaphor of the farm as a 'living organism' as applied by German-speaking agronomists since the late nineteenth and early twentieth centuries (Uekötter 2010: 170-181). Metaphorically speaking, the farm file was considered to be a biography – or even a radiography – of this 'living organism'. Accordingly, the registration form included a multitude of 150 features which were annually actualised: household and farm members (including those family members who did not work on the farm), land tenure and use, arable crops, livestock and livestock

yields, machinery, farm buildings etc. (Fensch 1939). All in all, the farm file documented the basic elements and relations of the agrosystem at the farm level.

The applications of farm file statistics were manifold: the calculation of farm inputs and outputs at local, regional and national levels, the improvement of farm management through agricultural extension or the ‘production’ of an agricultural space (Halfacree 2006). Whereas the data of the agricultural census were aggregated according to *administrative* units, farm file statistics enabled aggregations of data according to *economic* units. Statisticians of the Reich Food Estate reordered the agricultural space by classifying the communes of the provinces of Vienna, Niederdonau and Oberdonau into ‘production zones’, i.e. territories with similar conditions of agricultural production: the Pannonian flat and hilly land (including the wine-growing areas) in the east; the Alpine and Sub-Alpine regions in the south-west; the highlands in the north-west; and the flat and hilly area south to the river Danube in the west (Landesbauernschaft Donauland 1940, 1941). Though similar classifications were already made in Austria before 1938, the reordering of the agricultural space by the Reich Food Estate was much more sophisticated. The spatial reordering was considered a means for the planning of region-specific measures, therefore raising the efficiency of agricultural policy. This mapping was part of the state-led regulation of agriculture in the Nazi era – and beyond: Generations of agricultural statisticians in postwar Austria were concerned – or even obsessed – with the delineation of ‘production zones’ (Heller 1997). Thereby, a ‘productivist countryside’ with food production as its main function was created both virtually and in reality by the agronomic expert system (Halfacree 2006).

Though the *Hofkarte* of the Reich Food Estate disappeared with the breakdown of the Third Reich in 1945, it was replaced in 1946 by the *Betriebskarte* of the re-installed Chamber of Agriculture. Strikingly, not only the features in the tables, but also the fonts of the headlines looked similarly. Both content and form of these two forms of statistical registration indicate the unbroken continuity of farm file statistics from Nazi Germany to postwar Austria. Two articles in the agricultural press concerning the ‘farm record’, one from 1939 and the other from 1950, underline this continuity: both argued that there was no reason for mistrust (e.g. regarding taxation) by farm holders against the registration of their farms; both claimed that incorrect information in the ‘farm record’ would be contrary to the farmer’s interests; both emphasised the necessity of the ‘farm record’ for efficient agricultural administration; both declared farm aid as the main purpose of the ‘farm record’; both praised the insights in farm



development the ‚farm record‘ provided to the farm holder. The main difference was the political-economic context: the ‚battle for production‘ as a supply-oriented approach in the first case and the ‚battle for sale and price‘ as a demand-oriented approach in the second case.<sup>2</sup> As is shown by these articles, state regulation not only claimed for material capital in the form of food products, but also for symbolic capital in the form of the farm holders‘ *trust*. However, between the lines both articles reveal a lot of mistrust arising in practice against farm file statistics.

According to Michel Foucault (1995: 205, 2007), farm file statistics as invented in the Nazi era and continued after 1945 can be interpreted as a form of ‘panopticism’. The *panopticon*, initially designed by Jeremy Bentham at the end of the eighteenth century, was a circular prison which allowed the warden to observe all prisoners from a central position without being noticed by them. Similarly, farm file statistics allowed the agricultural apparatus to observe all farms without being noticed by their holders; moreover, it allowed farm holders to observe themselves. Thus, farm file statistics institutionalised state control of the ‚national farm‘ as well as farmers‘ self-control. However, ‘panopticism’ as institutionalised by farm file statistics before and after 1945 did not exercise total control over the ‚national farm‘; like other power relations, it was embedded in a ‚societal field-of-force‘, to use Edward P. Thompson’s (1978) famous metaphor, which both enabled and limited control over the farming community.

### 3. Farming styles

As already stated, at the eve of the Second World War, the ‘battle for production’ was not as successful as expected by the decision-makers of the Nazi agrarian apparatus. However, by far the worst result was achieved by the domestic production of animal and vegetable fats; the degree of self-sufficiency had only slightly improved from 52 percent in 1933/34 to 57 percent in 1938/39 (Volkman 1979: 301). Accordingly, Herbert Backe, the executive of the food issues of the expansionist 1936 Four Years Plan, together with agrarian experts lamented the ‘fat gap’ (*Fettlücke*) of German food economy (Corni & Gies 1997: 309-318). In order to close the ‘fat gap’, the decision-makers of the Nazi food regime shifted levers at several links of the agro-food chain. On the consumption side, the fat content of the German population’s diet ought to be reduced by the ‘direction of consumption’ (*Verbrauchslenkung*) and, since

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<sup>2</sup> See *Wochenblatt der Landesbauernschaft Donauland* 11/1939, 372; *Der Österreichische Bauernbündler* 18/1950, 5.

the beginning of war, the development of synthetic surrogates (Reith 2007). In the domain of distribution, the agrarian apparatus sought to raise imports of fats from all over German-dominated Europe by bilateral trade treaties with federate countries and, after the beginning of war in 1939, exploitation of the agricultural resources of the dependent and occupied areas (Corni & Gies 1997: 499-554). On the production side, the state-led campaign for domestic fat production was not only prolonged to the wartime period, but also enforced under the label of ‘war battle for production’ (*Kriegserzeugungsschlacht*) (Corni & Gies 1997: 469-497; Abelshausen 1998). Besides the domain of animal fats (which was one of the objectives of the ‘communal construction’ action), the production of vegetable fats ought to be raised by expansion of the acreage devoted to oilseeds. While the Nazi food regime mostly set political impositions (e.g. the confiscation of all food surpluses on the farm since the beginning of war), in this case economic incentives prevailed. A comprehensive package comprising financial, technical and legal measures was tied in order to promote the expansion of oilseed-growing: high fixed prices; additional bonuses for delivery contracts with processing enterprises; extra rations of nitrogen fertilizer; guaranteed redelivery of protein-rich oilcake as feeding stuff; special extension services and so on (Hanau & Plate 1975).<sup>3</sup>

How the ‘socio-technical network’ (van der Ploeg 2003: 101-141) of oilseed-growing addressed farm holders, is expressed by a leaflet distributed in 1940 via the official farmers’ journal in the province of Niederdonau (Figure 4). The headline follows a purely economic line of argumentation: ‘Oilseed-growing is worthwhile! Grow more oilseeds – but solely at suitable locations!’ In the centre of the chart, a macro-economic perspective prevails, arguing that one hectare of rape yields 650 kilograms of fat directly and, via milk production by dairy cows fed with oilcake, 100 kilograms indirectly, therefore 750 kilograms in total. At the margins of the chart, micro-economic arguments appeal to the – male – farmer’s self-interest: the redelivery of oilcake as feeding stuff in the upper left corner; the yield increase of wheat as subsequent crop in the lower left corner; high prices and bonuses in the upper right corner; and annual multi-cropping through cultivation of rape and intertillage on the same field in the lower right corner. The message encoded in this visual and textual arrangement of signs can be decoded as follows: growing more oilseeds serves not only the interest of the national food economy, but also the farmer’s self-interest, i.e. higher profits through a more intensive use of land and livestock as well as better rewards.<sup>4</sup>

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<sup>3</sup> See *Wochenblatt der Landesbauernschaft Donauland* 19/1940, enclosed leaflet.

<sup>4</sup> See *Wochenblatt der Landesbauernschaft Donauland* 19/1940, enclosed leaflet.

Figure 4: Leaflet promoting the cultivation of oilseeds in the province of Niederdonau, 1940

# Oelfruchtanbau – lohnt sich!

## Baut mehr Oelfrüchte – aber nur dort, wo sie hinpaffen!



**Rücklieferung von Oelkuchen als hochwertiges Kraftfutter**

**Höchster Fettertrag je Flächeneinheit**

**1 ha Raps u. Rüben ergibt durchschnittlich**

**KASSE**



**Gute Preise geforderte Abnahme zusätzliche Prämien insgesamt 44 RM je dz**

**Günstige Vorbedingungen für eine gute Weizenernte**



**Durchschnittsmehrertrag an Weizen nach Raps beträgt:**

<b>Körnerertrag</b>	<b>Reinfett</b>
<b>18 Dz =</b>	<b>65 Dz</b>
<b>Oelkuchen</b>	<b>Reinfett über Milch-erzeugung</b>
<b>11 Dz =</b>	<b>1 Dz</b>
<b>Gesamtertrag = 7,5 Dz</b>	

**In einem Jahr vom gleichen Feld zwei Ernten!**



**Raps u. Rüben**      **Zwischenfrüchte Kohlfacón**

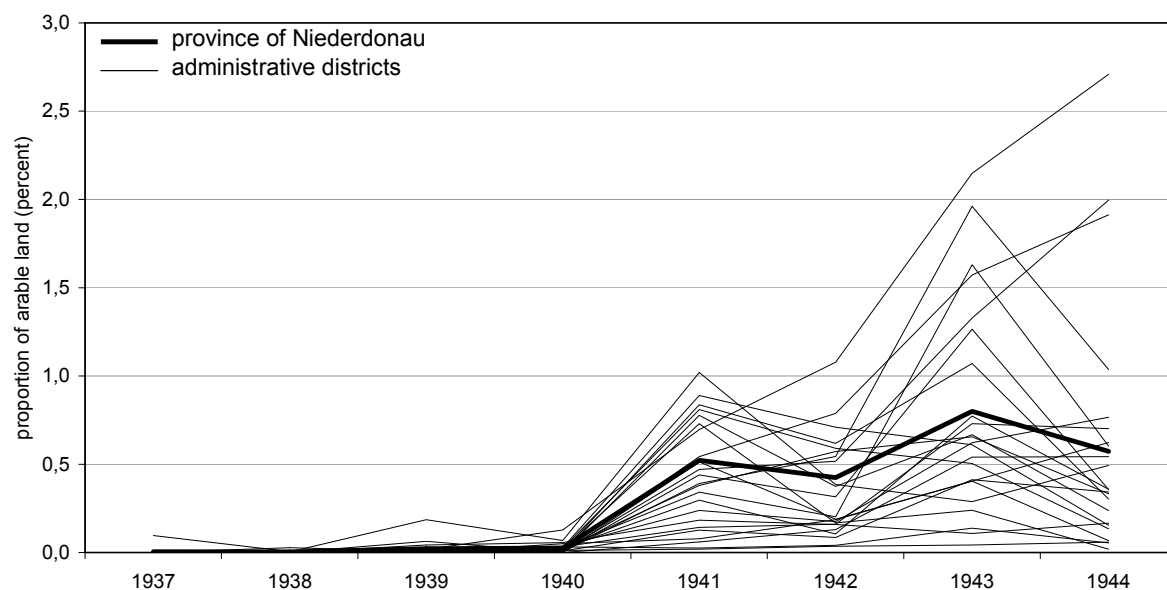
Jan Feb März Apr. Mai Juni Juli Aug Sept Okt Nov Dez

Source: *Wochenblatt der Landesbauernschaft Donauland* 19/1940, enclosed leaflet.

Strikingly, the discourse of oilseed-growing as mediated by the agrarian press was not in line with the mainstream of Nazi agrarian ideology; moreover, it considerably diverged from it. The Nazi ‚blood and soil‘-ideology idealised the figure of the ‚peasant‘, driven by extra-economic motives such as the provision of a ‚racially‘ pure community both at the levels of the family and the German ‚people‘; furthermore, it condemned the figure of the profit-oriented ‚farmer‘ (Lovin 1967; Bramwell 1985; Eidenbenz 1993). However, the discourse of the state-led production campaign as mediated by this leaflet turns the ideological hierarchy of ‚peasant‘ and ‚farmer‘ upside down: it praises the male ‚rational farmer‘ who decides to grow oilseeds due to precise calculation of costs and benefits. Nazi agrarianism, conventionally taken as an evidence for the ‚anti-modern‘ character of Nazism, was in practice more flexible and, thus, more compatible with modernist notions of farming than claimed so far. The discourses of the ‚battle for production‘ in general and oilseed-growing in particular appealed to farm holders to subject themselves to the subject-position of the ‚rational entrepreneur‘.

To what extent did farm holders in Niederdonau respond to the state-led production campaign for oilseed-growing? Since rape and turnip rape accounted for nearly one half of the acreage devoted to oilseeds, we focus on these two crops. According to the official agricultural statistics, there was no considerable response until 1940; however, from 1941 to 1944, the percentage of arable land devoted to rape and turnip rape increased substantially. At the province level, the proportions amounted to 0.5 (1941), 0.4 (1942), 0.8 (1943) and 0.6 percent (1944) of the arable land. At the district level a broad distribution above and below average becomes obvious (Figure 5). On the field of oilseed-growing, the ‘battle for production’ in Niederdonau turned out victoriously (though in other branches defeats were to be accepted); the acreage devoted to rape and turnip rape grew more than hundredfold from 43 hectares in 1937 to 4.453 hectares in 1944 (Österreichisches Statistisches Zentralamt 1948). According to farm level investigations in three study regions, a particular group of well-equipped farmers in favourable areas actually responded to this appeal by considerably increasing the acreage devoted to oilseeds (Langthaler 2010). According to these findings, the style of farming ‘rationally’ (in the agronomic sense) promoted by the agrarian apparatus was adopted by a part of the farming community. Thereby, this minority of farm holders became the vanguard of the ‘productivist’ food regime, characterised by (capital-) intensification, concentration and specialisation, which gained hegemony for the majority of the farming community in the postwar period – in Austria and elsewhere (Ilbery & Bowler 1998).

**Figure 5: Proportion of arable land devoted to rape and turnip rape in Niederdonau, 1937–1944**



Note: The South-Moravian districts of Neubistritz, Nikolsburg and Znaim are not included.

Source: calculation and design by the author according to Österreichisches Statistisches Zentralamt 1948.

## IV. Conclusion

Answering the question about the impact of the fascist regimes in Austria 1934 to 1945 on the transition from the capital-extensive to the capital-intensive food regime is quite tricky, especially for the case of ‘Austrofascism’. Given the agrarian romanticism in the ‘Austrofascist’ discourse, one might wonder if any kind of modernisation took place between 1934 and 1938. However, from the angle outlined in the introduction – market linkage, state regulation and farming styles –, a certain variety of modernity gains contour. First, under the regime of the ‘agrarian course’, both prospering and indebted farms increasingly got linked to markets: the former mainly to product markets, the latter mainly to credit markets. However, due to the oversupply of labour and the lack of demand for non-agricultural uses of land, incentives for investments in labour- or land-saving technology were modest. Second, the market regulation from the early 1930s onwards broadened and deepened the degree of state intervention reached so far, in Austria and abroad. However, the aim of these regulations was not to boost, but to limit agricultural production. Third, despite the renaissance of peasant paternalism due to the integration of unemployed remote relatives and non-family labourers in the family farms, entrepreneurial farming styles, especially in agrosystems specialised on intensive arable farming in favoured areas, found rooms of manoeuvre. These ambivalent developments point to ‘conservative modernisation’, i.e. striving for tradition-oriented goals – limited commercialisation and democratisation – by modern means. In Austria this path was taken by the state and provincial administration as well as most agricultural organisations from the late nineteenth century onwards – and readopted after the First World War. From the prospect of the 1920s, the ‘Austrofascist’ era marked the heyday – and, seen in retrospect, the turning point – of conservative agro-modernisation (Bruckmüller 1979; Langthaler 2005, 2008).

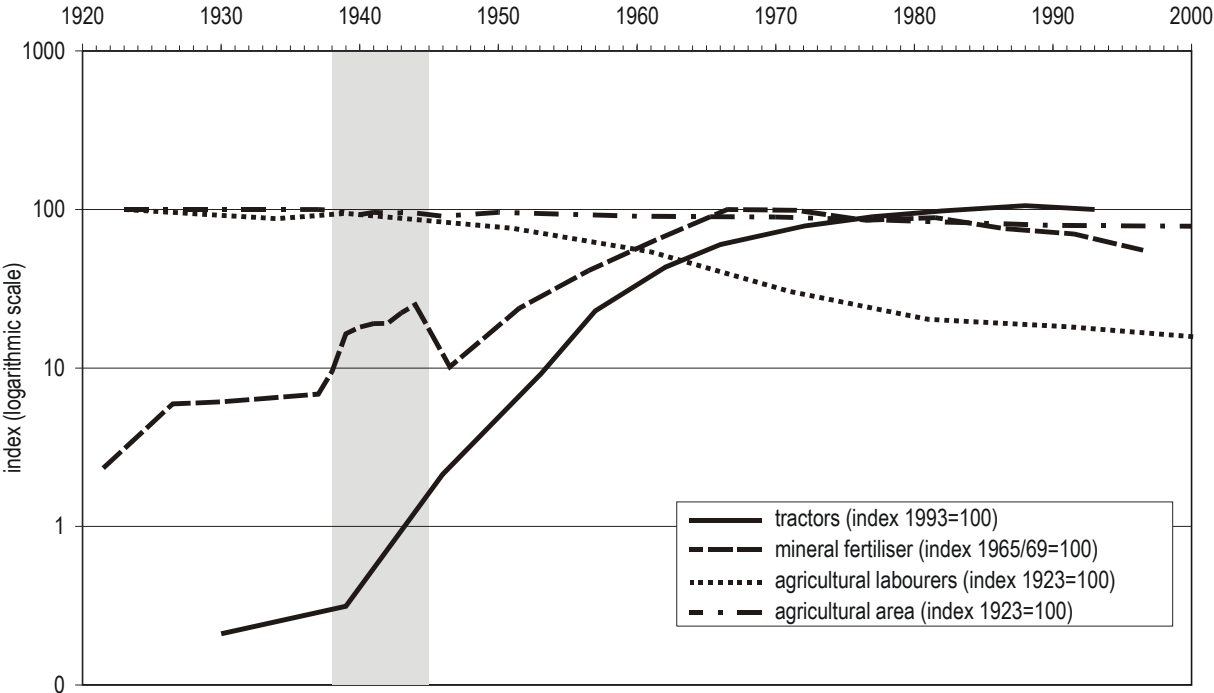
With Austria’s annexation by Nazi Germany in 1938, agricultural development entered a new phase, shifting from ‘conservative’ to *enforced* and from functional to *intentional* modernisation. The cases of the ‘communal construction’ action, farm file statistics and the boom of oilseed-growing reveal that Nazi agricultural policy promoted the temporal and spatial reordering of market linkages, state regulation and farming styles. The Nazi agrarian apparatus aimed at the ‘total reordering’ of Austrian agriculture; this state-led ‘megaproject’ became the vanishing point of agricultural regulation. Regarding the temporal dimension, the

present was subordinated to the future, while a sharp break with the past ‘system era’ (*Systemzeit*) – i.e. the ‘Corporate State’ 1934 to 1938 and its failure in solving the agrarian problems – was claimed. Regarding the spatial dimension, regulation at the levels of the local and regional lifeworld was more and more subordinated to regulation at the level of the political-economic system. Thereby, the ‘megaproject’ separated the ‘space of experience’ (*Erfahrungsraum*) from the ‘horizon of expectation’ (*Erwartungshorizont*) (Schinkel 2005). Governance by the ‘megaproject’ evolved not only top-down, but also bottom-up, fuelled by actors’ trust in the state-led regulation of the agricultural sector. According to the notion of the ‘national farm’, individual styles of farming were subordinated to the overall re-ordering of the agrosystem, guided by agronomic experts. The emerging agricultural ‘megaproject’ pointed towards intensified, specialised and concentrated – in short, *productivist* – farming, framed by the ideology of the superiority of the German ‘race’. Though this ideal was only partly realised before 1945, it had a real impact on the thoughts and actions of agricultural decision-makers, agronomists, teachers, extension staff and ‘progressive’ farm holders after 1945.

Let me finally evaluate the emergence of the productivist ‘megaproject’ of the Nazi era in the light of the varieties of modernity outlined in the introduction. Agro-modernisation in German-annexed Austria was a multi-faceted phenomenon; however, two emphases can be observed: First, most decision-makers of Nazi agricultural policy *intended* to modernise Austrian agriculture which they considered to be backward compared to the rest of the German empire. However, their ‘megaproject’ was neither clear-cut nor without controversy, but rather a – sometimes contested – amalgam of (seemingly) ‘modern’ and ‘anti-modern’ elements. This ‘alternative modernity’ pointed towards a highly productive as well as community-bound rural society as part of German industrial society, based upon state-of-the-art farm technology on the one hand and a critical mass of a ‘racially pure’ peasantry on the other hand. Second, diverse Nazi projects of agro-modernisation affected the agrosystem not totally, but only *partially*. While the institutional matrix – the principles of agricultural planning at the macro-level, the links between the agrarian apparatus and the farm holders at the medium-level, the farm holders’ self-images at the micro-level etc. – changed strongly, technical change vastly got deadlocked. But this was due to war-induced bottlenecks of material and labour rather than any ‘anti-modernist’ reservations of the decision makers. All in all, the Nazi era was no ‘great leap’ of agro-modernisation at all, but an irreversible step along the pathway to the productivist food regime in postwar Austria. For instance, the

substitution of mineral fertilizers and machinery for land and labour – one of the key features of the ‘productivist transition’ – already took off between 1938 and 1945 (Figure 6). Indeed, agro-modernisation in German-annexed Austria does not deserve the label ‘agricultural revolution’ (compared to the ‘revolutionary’ developments in Great Britain during the war as well as in Austria in the postwar era) (Short et al. 2007; Langthaler 2011; Langthaler & Martin 2011). But it shapes up as a pre-revolutionary *watershed* – or, to use Reinhart Koselleck’s (1972: XV) term, *Sattelzeit* – of agricultural development in the twentieth century. Similar to other fields of Austrian society, in agriculture there was no such thing as a ‘zero hour’ in 1945.

**Figure 6: The substitution of technical capital for land and labour in Austrian agriculture in the twentieth century**



Note: The shaded area indicates the Nazi era 1938–1945.  
 Source: Langthaler 2009: 823.

## Appendix: Key figures of Austrian agricultural development, 1920s–1960s

**Table A1: Weight of the agrarian sector in terms of the active population**

<i>year</i>	<i>people employed in agriculture (in 1,000)</i>	<i>people employed in agriculture (percent)</i>
1923	1,438	39.9
1934	1,259	37.1
1939	1,358	39.0
1951	1,093	32.6
1961	776	23.0

Source: Sandgruber 2002: 264.

**Table A2: Contribution of agriculture and forestry to GNP**

<i>year</i>	<i>total value of agricultural and forestal production (millions of Schilling)</i>	<i>contribution to GNP (percent)</i>
1929	1,546	12.8
1937	1,407	14.3
1948	4,716	14.5
1950	8,574	16.4
1960	19,022	11.1

Source: Sandgruber 2002: 344.

**Table A3: Distribution of landed property, 1930**

<i>farm size</i>	<i>farm units (number)</i>	<i>farm units (percent)</i>
0.5–5 hectares	216,815	50.0
5–10 hectares	76,004	17.5
10–20 hectares	73,446	16.9
20–50 hectares	52,783	12.2
50–100 hectares	8,290	1.9
more than 100 hectares	6,020	1.4
total	420,479	100.0

Source: Sandgruber 2002: 300 f.

**Table A4: Use of tractors**

<i>year</i>	<i>tractors in total</i>	<i>tractors per 1,000 people employed in agriculture</i>
1930	720	0.6
1939	1,074	0.8
1953	30,992	28.4
1962	78,748	190.4

Source: Sandgruber 2002: 264, 343.



**Table A5: Use of mineral fertilizer (annual averages)**

<i>year</i>	<i>N</i> (1,000 tons)	<i>P</i> (1,000 tons)	<i>K</i> (1,000 tons)	<i>total</i> (1,000 tons)	<i>tons of mineral fertilizer per</i> <i>100 hectares of agricultural</i> <i>land (excluding forests and</i> <i>unproductive area)</i>
1930/37	5.9	12.8	7.5	26.2	0.6
1938/44	19.5	18.9	42.1	80.5	1.9
1945/49	13.8	16.9	12.8	43.5	1.1
1950/54	26.6	38.8	36.0	101.4	2.4
1955/59	37.9	68.9	69.2	176.0	4.3
1960/64	60.5	109.7	108.3	278.5	7.1

Legend: N = nitrogen, P = phosphorus, K = potassium

Source: Sandgruber 2002: 201, 205.

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