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052183192X - Ecology, Economy and State Formation in Early Modern Germany

Paul Warde

Excerpt

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Introduction

I will begin with two stories, stories that seem to provide contradictory accounts of the powers of the early modern state over the lives of its lowly subjects. Sometime in the late 1540s, a forest warden, a lowly paid official who was responsible for enforcing forest laws on the ground, was walking on patrol in an area of meadow in the wooded hills to the north-west of Stuttgart. ‘Young Hans’ was about thirty-five years old and had only recently begun what would be a long career as a warden. On the meadows he ran into his neighbouring warden, one Martin from Rutesheim. Hans commented that he hadn’t seen Martin in a long while, and they agreed to go and have a drink of wine together, almost certainly the locally produced white wine, in the nearby village of Weilimdorf. On the way they ran into the swineherd of Weilimdorf with his pigs on the ‘wasted meadows’. The name was somewhat misleading, as the pasture there was in fact quite good owing to its open canopy and protected status. ‘Horstus Leckher’, Hans said to the swineherd, ‘I have forbidden you more than once’ to be taking his herd into the meadows. As he told the swineherd he would do, Hans went to the house of the ducal bailiff and village headman (*Schultheiß*) of Weilimdorf to complain. The *Schultheiß*, however, was not at home, and so Hans dropped the matter and we may presume went off for his drink with Martin. This was not the only time that Hans had cause for complaint. Both he and Gall Schlecht, who had earlier been the field warden of the village and who by the 1570s was the swineherd, testified that Hans regularly came knocking at the door of the *Schultheiß* to tell him to keep the village herdsmen out of the meadows. However, although within his power, Hans never fined anyone for these transgressions. And thirty years later in the 1570s, villagers were still letting their cows, sheep and pigs go where they wanted. They had done so in the 1530s along with many other villages, coming to blows with men from Stuttgart in 1536 who temporarily gaoled herders they felt were in ‘their’

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woods. And they were doing much the same, and still squabbling, in the 1610s.¹

The second story is rather different. On the Friday after Ascension 1563, Martin Schütz's wife was returning home from the shepherd's house in the village of Dürrenmenz at about ten in the evening. This woman, whose first name we do not know, was about forty, of pious repute, and often visited the sick. She and her husband were 'hard-grafting true workers and day-labourers', with eight children to support. On this night the shepherd's house was the scene of a traumatic deathbed, and as she reached her own dwelling, Schütz's wife let out a lament. 'O God, O God, what wretchedness and misery is on this Earth, what must a person suffer until he comes away from this Earth, O God do not forsake us.' Suddenly, an angel stood beside her. 'O wife, what lamentations have you?' 'I ask God the Almighty', she replied, 'that he will send his Holy Spirit to us to shine his light upon us, that we may bear the wretchedness and misery of the world with patience.' 'O you wealthy', answered the angel, 'O you wealthy and your unrepentant hearts, how are your hearts set so hard against the poor. God is angered.'²

This was remarkable enough. But the angel continued to appear, even after the authorities came to hear, quite by accident, of the apparitions. The angel appeared when she was laying her young child down to sleep in the afternoon; when she was cutting fodder for livestock with other wives and children in the village woodland; when she was churning butter. Soon the tales spread. Over the border in Baden, a woman was heard to claim that the 'angel woman' would preach of a prophecy and the pastor would record it. Hundreds of people flocked to the village from neighbouring communities, 'like the Catholics go on pilgrimage' (these villages were nominally Lutheran). Her husband 'was not pleased by these matters'.

The government moved swiftly to interrogate the woman. Senior theologians pored over the angel's comments. Was he a phantasm, a ghost, an evil spirit, or least likely, the real thing? The village headman (*Schultheiß*) sought, with some success, to stem the flow of people seeking the 'angel woman'. Locally, social tensions were high. Hailstorms had caused crop damage, only a year after a great hailstorm had struck the vineyards of Stuttgart and led to the burning of eleven alleged witches. The angel seemed to want to stir up the poor against the rich. Officials reached back into their archive to re-examine an earlier case in the village of Burckach where a young boy had been

¹ HStAS A368 Bü 12.

² This and the following passages draw on the testimonies in HStAS A206 Bü 3618.

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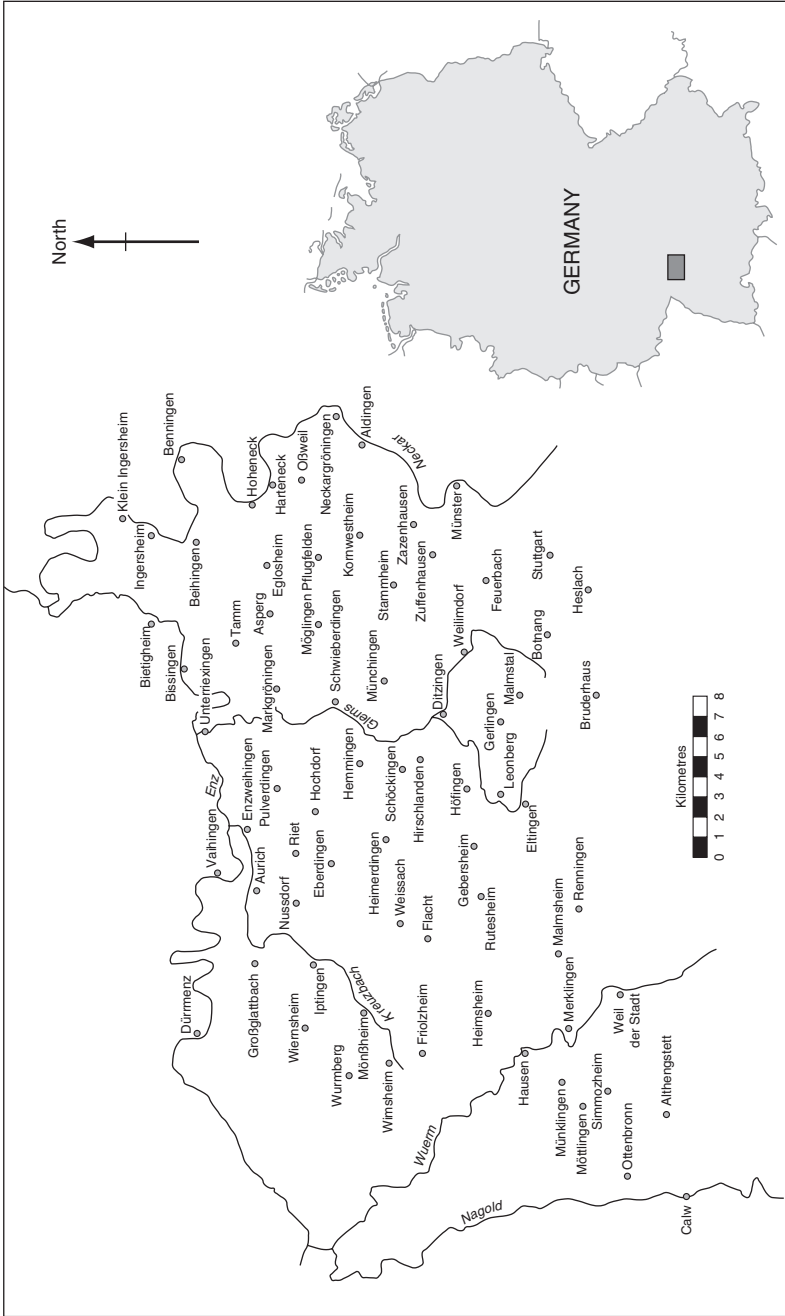
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'visited' by an 'angel' in his bed at night. Eventually, having uncovered a previous history of family visions, the government concluded that the angel was mere fantasy and commanded the woman to speak no more of it. Schütz's wife, perhaps fortunately, disappears from the record.

A state that interrogates young boys about their night-time visions? Where theologians dissect the comments of an angel as relayed by the village do-gooder? Such things were not just peculiarities of more modern forms of surveillance and regulation. But was this the same world where for decade after decade villagers and indeed village officials flouted the instructions of the agents of central government who lived and drank among them? Of course, these stories tell of very different things. Despite the extraordinariness of the second story, both to contemporaries and to us, students of the early modern period are far more likely to know of the second kind of tale than the first. In the instance of the angelic apparition, the machinery of government seems pervasive, all-interrogative. Yet students of the early modern world often tend to think that the state was, by later standards, quite weak. In other words, that the regular flouting of laws characterised long centuries of their existence. The first story rings truer to this viewpoint than the second, and was certainly a far more frequent occurrence, although it is less well known. One can, however, find books and articles that argue for the strength or weakness of the state in any early modern century we care to choose. Part of this apparent confusion lies in a categorical elision, a collapsing of the multiplicity of governmental action into one. It is surely permissible for 'the state', a mighty and highly diverse beast, to be good at some things and bad at others; it does not function equally well in all walks of life, as we well know today. Yet this situation has also arisen because studies of the operation of the state have tended to focus on things that we, in a world of abundance, term 'immaterial': authority, divinity, sovereignty or community. There is no disputing the centrality of these and other related issues. At the same time, however, the exercise, application or appropriation of these ideas was linked to very material things: fodder for cows, sheep and pigs; the holding of property; hail; death at the end of a wretchedly hard life. The relevance and power of the immaterial rested upon its intersection with the material realities of existence. This is a book about the state and the material world.

There have been plenty of books written about the influence of the state on the material world. There have also been plenty of books written about how the material world shaped different types of states.³

³ To pull a couple from a potentially large selection, Scott, *Seeing like a state*; Wittfogel, *Oriental despotism*; see the discussions in Ellen, *Environment, subsistence and system*.



Map I.1 General map of area

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This work thus falls into at least two very well-established traditions, which is by no means a bad thing. It has been rarer however to set these issues together in a study of the constant and dynamic interaction of all levels of government and material resources, at least in the early modern period. This will hopefully provide a fresh perspective not just on what the state did, or how it was constrained, but how it was *formed*. The reader should perhaps be warned that there will be more heard about flocks than heavenly hosts. Angels seem to have said what large numbers of people already thought; but sheep did their own thing, and their influence is thus deserving of explanation.

The arena for this investigation will be the forest district (*Forstamt*) of Leonberg in the Duchy of Württemberg, lying to the north-west of Stuttgart, from where the two stories above have been taken (see map I.1). In 1600 this region, which stretched from the foothills of the Black Forest in the west to the narrow valley of the Neckar in the east, was home to around thirty thousand souls. It was a land of nucleated villages and undulating hills of Muschelkalk, with pockets of clay and loam, rising from the east to the west. On the southern fringes of the region stood a massif of sandstone hills that formed a horseshoe around the city of Stuttgart, home to some ten thousand souls at most. The *Forstamt* had a scattering of small towns, none holding more than two thousand inhabitants at any point, and some less than half this size. These semi-urban centres were often barely distinguishable from the largely agricultural villages that dotted a landscape of open fields, riverbank meadows, woodland and vineyards. Most small towns, however, were centres of local government. The region was divided into various smaller districts (*Ämter*), binding the small towns into a unit with a couple of or a dozen of the surrounding settlements, with each district ruled by a local governor, the *Vogt*, who resided in the town. Thus there was an *Amt* Leonberg, centred on the small town of that name, as well as the much larger *Forstamt* Leonberg, so named because the ducal forester happened also to live in Leonberg. Why is a forestry district the unit of analysis? This is because wood was the most important raw material of this society, and a matter that the state concerned itself with greatly.

Why wood?

This book is a study of the use of wood and the management of its source, woodland. There was basically no item, or economic or social activity, in early modern central Europe that did not involve wood in its production, transportation or environment. Wood provided, literally,

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the framework for everyday life. Werner Sombart's comment that the pre-industrial era was above all the 'wooden age' is rightly celebrated and repeated.⁴ Yet despite this, detailed studies of the wood economy and society's relations with it have remained, for the most part, far from the mainstream, and some countries have produced no major studies in recent years at all.⁵ Estimates of levels of wood consumption and wood production are few and far between, a situation unimaginable in the case of foodstuffs. Wood was everywhere tangible and discussed in early modern Europe, and thus a study of any of the elements in the title of this book – ecology, economy, state formation – invites an understanding of what was going on with this material. Equally, any study of wood can become an avenue to understanding much of the needs, tensions, conflicts and attitudes of the day. Of the four very basic necessities of life, food, clothing, heating and housing, the latter two directly concerned wood, and almost solely wood, in this era. As people heated food and baked bread, it also intimately concerned the first, and one cannot even make clothing without spindles, distaffs and looms.

Sombart used the expression the 'wooden age' to distinguish the pre-industrial and industrial eras. As he saw it, the Industrial Revolution was characterised to a large degree by a *relative* decline in the importance of wood as an energy source and as a raw material.⁶ There have been many characterisations of the Industrial Revolution, but a recent and forceful one has made much the same argument in more sophisticated, and wider, terms. The Industrial Revolution was above all a shift from an economy based on *animate power* (plants and animals) to one based on *inanimate power* (above all, types of fossil fuels and engines). Tony Wrigley has attractively characterised this as the shift from an 'organic economy' to a mineral-based energy economy.⁷ Central to this process is a move away from a world based around the natural growth cycles of organic matter to one that can exploit the stored up 'capital' of fuels that do not have to be reproduced, for at least as long as stocks last. This last strategy has undoubtedly fuelled massive and unprecedented

⁴ Sombart, *Der moderne Kapitalismus*, Bd. II.2, p. 1138.

⁵ Recent years have seen renewed interest in *forest* history, in part propelled by scholars beyond Europe, but less interest in *wood*. See Agnoletti and Anderson, *Methods and approaches*; Kirby and Watkins, *Ecological history*; Petterson, *Skogshistorisk Forskning*; Watkins, *European woods and forests*.

⁶ In absolute terms, the consumption of wood has generally continued to expand. *Per capita* consumption of wood in Germany today however is probably a little lower than in the early modern period. For current consumption, see Schmidt, *Der Wald in Deutschland*, pp. 3–4; for a wide-ranging global study, see Williams, *Deforesting the earth*.

⁷ Wrigley, *Continuity, chance and change*; Wrigley, 'Energy constraints'.

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economic growth both in terms of the overall size of the economy, and *per capita* income.

If this energy revolution is key to the Industrial Revolution, then we must understand why it took place. This book will certainly not answer that question, which has already been the cause of large and heated debate. In the English language, the proposition of John Nef in 1932 that a ‘timber famine’ produced a price situation favourable to the adoption of coal as a major fuel, perhaps as early as the sixteenth century, is the starting point for all discussion.⁸ Most countries on the continent, but most notably France and Germany, have seen similar historiographical debates devoted not only to the transition to coal use (which came as late as the second half of the nineteenth century or even early twentieth century in many parts of Europe), but the development of modern forestry.⁹ The latter was traditionally seen as an initial and necessary solution to ‘wood shortage’ (*Holz-mangel*) before cheap transport, above all railways, allowed the switch to fossil fuels. Often the debate has been couched in unhelpful terms. ‘Timber’, as it is usually understood to mean large pieces of mature wood, is not at the heart of the issue because it was not used as fuel. Similarly shipbuilding, which is often blamed for deforestation, consumed only a tiny part of aggregate demand, and then for particular types of unusually shaped timber.¹⁰ Numerous studies, of both the iron industry and of price series, have since sought to refute the ‘timber famine’ thesis and argued instead that the move to coal was an autonomous innovation, a technological change that was not connected to incipient shortages.¹¹ Certainly contemporaries worried about shortages of wood, but, it has been argued, this was largely a rhetorical ploy designed to ensure that others were barred access to the resources that particular interests wanted to exploit on as favourable terms as possible.¹²

⁸ Nef, *The rise of the British coal industry*; Hammersley, ‘The charcoal iron industry’; Hatcher, *The history of the British coal industry*, pp. 5–55; Hatcher, ‘The emergence of a mineral-based energy economy’; Allen, ‘Was there a timber crisis?’

⁹ For a small selection of this very extensive literature, see Williams, *Deforesting the earth*, pp. 168–209, 276–301; Woronoff, *Forges et forêt*; Radkau, ‘Wood and forestry in German history’; Schäfer, ‘*Ein Gespenst geht um*’; Ernst, *Den Wald entwickeln*; Schmidt, *Der Wald in Deutschland*; Sieferle, *The subterranean forest*; Kjaergaard, *The Danish Revolution*.

¹⁰ For example, Rackham, *Trees and woodland*, pp. 94–7; Grove and Rackham, *The nature of Mediterranean Europe*, pp. 167–8; Eliasson and Nilsson, ‘Rättat efter skogarnes auftagende’.

¹¹ Allen, ‘Was there a timber crisis?’; Hammersley, ‘The charcoal iron industry’.

¹² Radkau, ‘Zur angeblichen Energiekrise des 18. Jahrhunderts’; Radkau, ‘Das Rätsel der städtischen Brennholzversorgung’; Allmann, *Der Wald*; Schäfer, ‘*Ein Gespenst geht um*’.

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The ‘shortage’ debate is to some extent a red herring. If some of a resource still exists, then that resource is only in short supply if people are not prepared to pay the cost of getting it to the consumer. It is another way of saying that it is too expensive. A frequently employed argument in eighteenth-century Germany was that wood was wasted because it was too cheap, basically meaning that some consumers disliked the fact that other consumers got it for less. Of course, a product can be in short supply if we expect it to come from a particular geographical unit, such as a local woodland, principality, nation-state or even continent. It is always *relative* to a particular unit that circumscribes how far we think it is reasonable to go to get the product. If the expense becomes very great, then it can have an unsettling or even catastrophic effect on economic and social relations. Much of the debate about ‘wood shortage’ has really been about how large an area historians have circumscribed as being a reasonable and affordable supply zone in their analysis, although they rarely state this in simple terms.¹³

Part of the purpose of this study has thus been to understand the *flows* of the resource and the *position* from which particular consumers have viewed its availability. This requires an understanding of how wood was produced (and thus woodland ecology); the state of the economy; the property relationships determining access to the resource; particular forms of demand for wood; and its expense in particular places, at any one time, relative to other commodities. One can still talk about shortages, but only in this carefully specified sense. In order to do this I have chosen an area of early modern Europe that might be characterised by its lack of peculiarity. The region of Württemberg that I have chosen to study was largely agrarian, though with a little proto-industry. The region subsisted from arable farming, viticulture, some dairying and sheep farming. It was not heavily wooded but neither was it short of woodland. It was not far from a major source of timber and fuel in the Black Forest, and lay adjacent to what, for the day, was a medium-sized city. Middling trade routes crossed the territory, but it had none of the advantages for transporting goods of maritime regions. In other words, the *Forstamt* Leonberg experienced much the same cluster of fortunes as many other inland regions of the continent, with no factors that would obviously skew its resource consumption in a particular direction by making that consumption, in early modern terms, especially expensive or cheap. It is precisely these regions

¹³ Schmidt, for example, basically accepts the rhetoric of small and fragmented early modern principalities being natural units of supply despite his careful attempts at quantification. Schmidt, *Der Wald in Deutschland*.

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which generated the great bulk of consumer demand for basic commodities in early modern Europe, and which are almost systematically ignored by many economic historians. Württemberg's history during this period was, however, far from banal. It was often far more dramatic, and indeed calamitous, than any of its inhabitants could have possibly wished.

We need to know more about pre-industrial wood use, not only in understanding the societies of the time as precursors to the Industrial Revolution, but also their internal dynamics in their own right. Wood here is the prism through which many aspects of social interaction and economic practice can be observed. Major regulation of wood at the level of the state began in Germany, and much of Europe, during the sixteenth century, but the processes that drove this regulation are more often assumed than proven. The period before the eighteenth century has rarely been a matter for consideration even by forest historians, with whom German language studies have been unusually well endowed. Still less have economic historians focused rigorously on such issues of resource management in this period. It is true that fuel often took up at most 5 per cent of household incomes (drawing on data from large cities) and perhaps as little as 2–3 per cent of total income.¹⁴ Yet coal took up as little as 1 per cent of National Product in eighteenth-century England, and it is rather difficult to write an economic history of England in that period without putting coal somewhere near the heart of the story.¹⁵ This study hopes to contribute a large amount of empirical evidence at a fairly fine-grained scale – but at a scale large enough to permit comparative observations. It is a study of wood, but one that seeks to situate wood near the heart of a larger story of ecological, economic and social development. To comprehend this story I have chosen to focus on three areas of study: ecology, economy and state formation. The background and uses of these fields of investigation in relation to this work now require more detailed elucidation.

Ecology

In the last two decades 'ecology' has become one of those 'good words' that must always represent some useful and progressive insight. It has proven to be a flexible creature, emerging in all kinds of academic, political and everyday talk. Of course like any overly useful concept, such ubiquity can be its downfall – how can we tell that it gives any real

¹⁴ Troeltsch, *Die Calwer Zeughandlungskompagnie*, pp. 234–5; see also chapter 5.

¹⁵ Hatcher, *The history of the British coal industry*, p. 551.

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additional insight into issues, or generates any problems genuinely deserving of solution? The term *Ökologie* was created by Haeckel in 1866, with partly mystical connotations of holism and interconnectedness. The ecological sciences, particularly those relating to biology and behaviour, have latched on to the importance of the interconnections between factors often traditionally isolated for study whilst largely discarding the mysticism.¹⁶ Ecology has hence become particularly associated with the ‘natural world’. A Chicago School of ‘social ecology’ emerged in the 1920s, and the concept took firm root in anthropology, most famously in the work of Julian Steward.¹⁷ History has preferred the term ‘environment’ for its intellectual encounter with the natural world, at least in Europe. Interest in human–environment relations have been largely mediated via historical geography and historians such as Fernand Braudel and his generation of the *Annales* School in France, and W. G. Hoskins and ‘local history’ in England.¹⁸ ‘Environment’ has also been the preferred term for the many who have wrestled with the question of the relationship between a population and the resources available to it derived from the work of Malthus and, to some degree, Ricardo. ‘Environmental History’ has, however, only recently emerged as an explicit sub-discipline of the historical sciences, first in North America and then in Europe.¹⁹ Extremely diverse in character, it has no more methodological implications than an interest in the relationships between humans and the non-human world in which they find themselves.²⁰

Ecology has both a broader and more precise meaning. One might say that by operating at a higher level of abstraction, ‘ecology’ permits models that can be fitted to more kinds of problems than describing a relationship between ‘people’ and their ‘environment’, though the latter is usually a helpful distinction. ‘Ecology’ describes the

¹⁶ Mensching, ‘Ökosystem-Zerstörung’, p. 15; Ellen, *Environment, subsistence and system*; Moran, *Ecosystem concept*.

¹⁷ Steward, *Theory of culture change*; Steward, *Evolution and ecology*.

¹⁸ Braudel, *The Mediterranean*; Hoskins, *Making of the English landscape*, to name just two of many books in these traditions.

¹⁹ The American Society for Environmental History was founded in 1976, the European Society for Environmental History was formally instituted as late as 2001. The field has matured to produce some first broad syntheses. See Hughes, *Environmental history of the world*; Radkau, *Natur und Macht*; Simmons, *Environmental history*; Worster, *Wealth of nature*; Myllyntaus and Saikku, *Encountering the past in nature*; Siemann, *Umweltgeschichte*; Delfort and Walter, *Storia dell’ambiente europeo*; Quaternary and Holocene studies also make use of the term ‘environmental history’.

²⁰ Though there are of course trends and basic questions that have been repeatedly investigated. For some statements of these approaches, see Worster, *Rivers of empire*; Worster, ‘Transformations of the earth’; Sörlin, *Naturkontraktet*; Cronon, *Uncommon ground*. See also note 19.