Food, Energy and the Creation of Industriousness

Until the widespread harnessing of machine energy, food was the energy which fuelled the economy. In this groundbreaking study of agricultural labourers’ diet and material standard of living Craig Muldrew uses new empirical research to present a much fuller account of the interrelationship between consumption, living standards and work in the early modern English economy than has previously existed. The book integrates labourers into a study of the wider economy and engages with the history of food as an energy source and its importance to working life, the social complexity of family earnings and the concept of the ‘industrious revolution’. It argues that ‘industriousness’ was as much the result of ideology and labour markets as labourers’ household consumption. Linking this with ideas about the social order of early modern England the author demonstrates that bread, beer and meat were the petrol of this world and a springboard for economic change.

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Cambridge Studies in Economic History

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Food, Energy and the Creation of Industriousness

*Work and Material Culture in Agrarian England, 1550–1780*

Craig Muldrew

*University of Cambridge*
To Janine
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The subject of this book occurred almost accidentally. After finishing my first book, *The Economy of Obligation*, I intended to take the themes of that work forward into the eighteenth century, looking at the origin of local banking and networks of trust. While that work has continued, some years ago I became interested in the consumption of the labouring poor through my work into wage payments and research done for the chapter in *The Economy of Obligation* which examined household consumption and market transactions. There I was very surprised at the amount of meat consumed and the high numbers of butchers in early modern towns such as King’s Lynn. I presented this information in a quite rudimentary form at a conference in 2000, where the argument for a relatively high level of meat consumption was met with scepticism, if not downright incredulity. Some years later, this spurred me on to do much more research into diets, which in turn led me to consider Robert Fogel’s work on human energy. I then attempted to think of human energy in the same way as Tony Wrigley has analysed the input of animal energy into agricultural production.

The study of labourers’ inventories also stemmed from work done for *The Economy of Obligation* using probate inventories. When researching in the Hampshire Record Office I noticed that there were much larger numbers of labourers’ inventories than I thought existed. Subsequently I found out that Leigh Shaw-Taylor had discovered labourers’ inventories in Northampton and Lincolnshire. We then worked together to discover samples of labourers’ inventories in other counties and had them made machine readable with two British Academy Small Grants. Here I have analysed this sample and, in doing so, naturally attempted to test aspects of Jan de Vries’s theory of what he has termed the ‘industrious revolution’, which has been one of the most stimulating recent macro-theories of early modern economic development. Doing this led me back to early modern economic pamphlet literature, where, to my surprise, I found that industriousness had already been conceived of as a way to increase England’s national wealth. This discovery allowed
me to make sense of change over time in a new way. Thus, the whole project grew organically out of what at first seemed to be a series of separate problems which gradually came together. As a result the themes and structure of the book have evolved, often slowly, over the last five or six years, but I think I have learned much more by chance and accident rather than relying on hypothesis.

I have also learned even more from continual interaction with colleagues at Cambridge, the University of Exeter, the University of Bologna and elsewhere. At the beginning of this project it is fair to say my knowledge of agrarian history was limited, as I had previously worked mostly on urban records, but I have learned a great deal from friends and colleagues doing agricultural history. I have benefited most from many conversations with Leigh Shaw-Taylor. I have also learned much from Mark Overton, who kindly provided me with data he already had of labourers’ inventories from Kent after 1600, and Bob Allen, who told me how useful Thomas Batchelor was as a source. Naomi Tadmor kindly lent me her photocopy of Turner’s original diary to investigate his dinners. James Bates also shared his great knowledge of brewing as well as his excellent beer. I would also like to thank Ian Archer, Matthew Clark, John Chartres, Martin Daunton, Diccon Cooper, Mark Dawson, Amy Erickson, Laurence Fontaine, Peter King, Peter Kitson, Alysa Levene, John Money, Carlo Poni, Emma Rothschild, Thomas Sokoll, Richard Smith, Sarah Pennell, Roberto Scazzieri, Alexandra Shepard, Helen Speechley, John Styles, Phil Withington and John Walter. Joe Barker, Sarah Brown, Alec Corio, Nicola Henshall, Ian Keefe, Matt Ward, Ali Warren and Matthew Westlake all worked as researchers transcribing probate inventories and account books for me, and the book would have been impossible without their excellent work. I would also like to thank Tony Wrigley, Keith Wrightson, Paul Warde and Ken Sneath for reading parts of the book, and finally Janine Maegraith for not only reading the entire manuscript and making many helpful comments but attempting to correct my dyslexic word-processing in heroic fashion. Finally it remains to thank the various funding bodies which have helped make this research possible. Since, as I said, it is a work which evolved in pieces, it required a number of small grants, which in this way are just as useful and necessary to the research community as large grants. Over the gestation of the book the Ellen Macarthur Fund, the Centre for History and Economics and Queens’ College Fellows Research Fund have all helped. The British Academy awarded Small Research Grant no. SG-40825, ‘The Material Wealth and Work of the Labouring Poor in England as Reflected in Probate Inventories, 1570–1790’, to transcribe the labourers’ inventories. The Bologna Institute for Advanced...
Preface

Studies provided me with a three-month fellowship from February to April 2005 which allowed me to start writing and to present my findings there. I would like especially to thank Carlo Poni and Roberto Scazzieri for showing such hospitality during my visit. Finally I would like to thank the Arts and Humanities Research Council, whose award of a term of leave in 2008 under their Research Leave Scheme allowed me to finish the first draft of the book.
Note on measurements and inflation

The weights and measurements used in this book are British Imperial and avoirdupois measurements, which are the closest to those used by contemporaries. In many cases, however, historical measurements of certain things were different, and such instances are discussed specifically in the text. When comparing monetary values before 1650 inflation has been taken into account, where it has been appropriate to do so, using the price data collected by Phelps Brown and Hopkins, as summarised by Christopher Clay. After this date there was a slow overall deflation of grain prices to around 1765. Unfortunately there are no similarly ample price data for manufactured goods, but there is evidence that prices here also went down after 1650. I have chosen not to deflate values, but rather to discuss how lower prices could have affected the amount of food and household goods purchased.

In many of the calculations which follow I have often expressed values in exact numbers. This has been done for consistency, so that the method of calculation can be traced. But it needs to be mentioned that with any historical figures there will almost always be some degree of approximation, which I have tried to stress in the text.

The standard unit for grain was the bushel (equal to 8 gallons), and 8 bushels made a quarter. The weight of a bushel of grain could vary, but a bushel of wheat weighed about 56 lb or roughly 25 kg, a bushel of barley 48 lb, and a bushel of oats 38 lb. The unit of measurement for area was the acre, equivalent to about 0.4 hectares. Before 1971 the English pound (£) consisted of 20 shillings (s); each shilling comprised 12 pence (d); and a penny comprised 4 farthings. In some tables monetary amounts are given in pounds with decimal places for ease of calculation and comparison. Dates given are modern, with the year beginning on 1 January.
Abbreviations


CKS Centre for Kentish Studies
CRO Cambridgeshire Record Office
ERO Essex Record Office
HRO Hampshire Record Office
NCS Northumberland Collections Service
NRO Norfolk Record Office
SRO Somerset Record Office
WRO Wiltshire Record Office
WYASB West Yorkshire Archive Service, Bradford
WYASL West Yorkshire Archive Service, Leeds